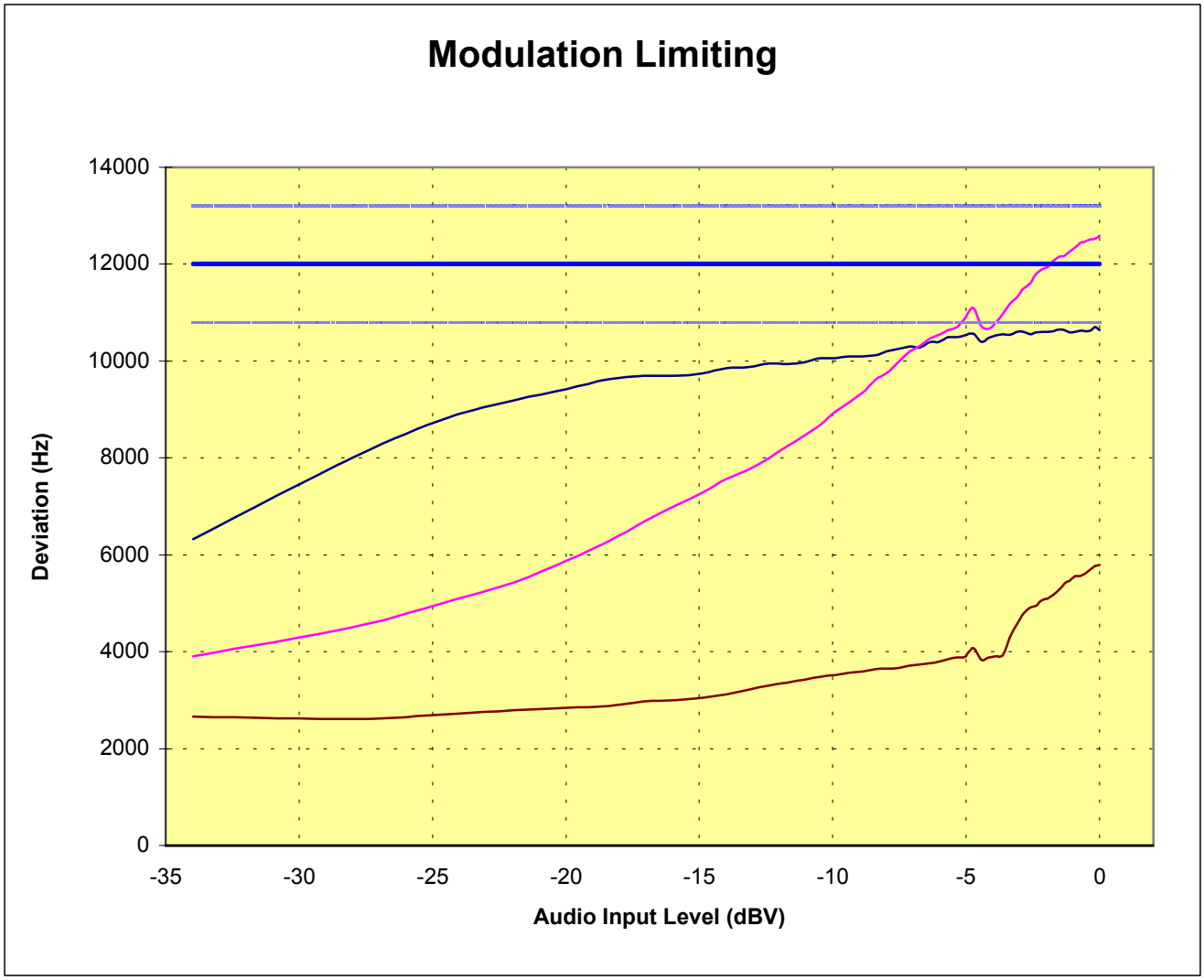
SUBJECT: Modulation Characteristics Test Report No.:22.210423240.PNN
FCC Part 22 Test Date: 05. 30. 2001

EUT: **CDMA Wireless Modem PC Card (PCMCIA)**
Model: *1CD-5000-3*
FCC ID: **PNN-CELL5000-3**

REFERENCE: 1 kHz = 0 dB

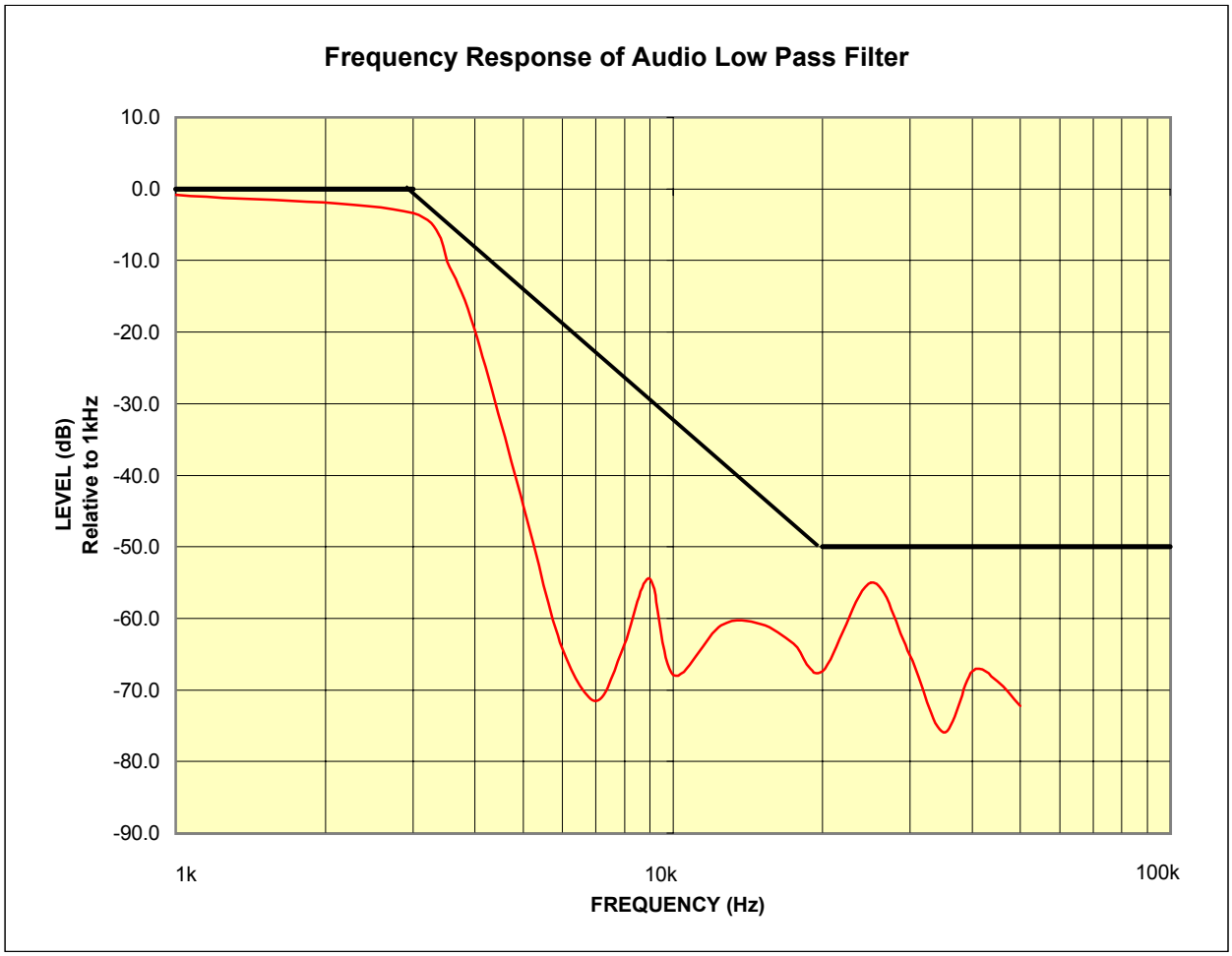


SUBJECT: Modulation Characteristics
FCC Part 22

Test Report No.:22.210423240.PNN
Test Date: 05. 30. 2001

EUT: **CDMA Wireless Modem PC Card (PCMCIA)**
Model: *1CD-5000-3*
FCC ID: **PNN-CELL5000-3**

REFERENCE: 1 kHz = 0 dB

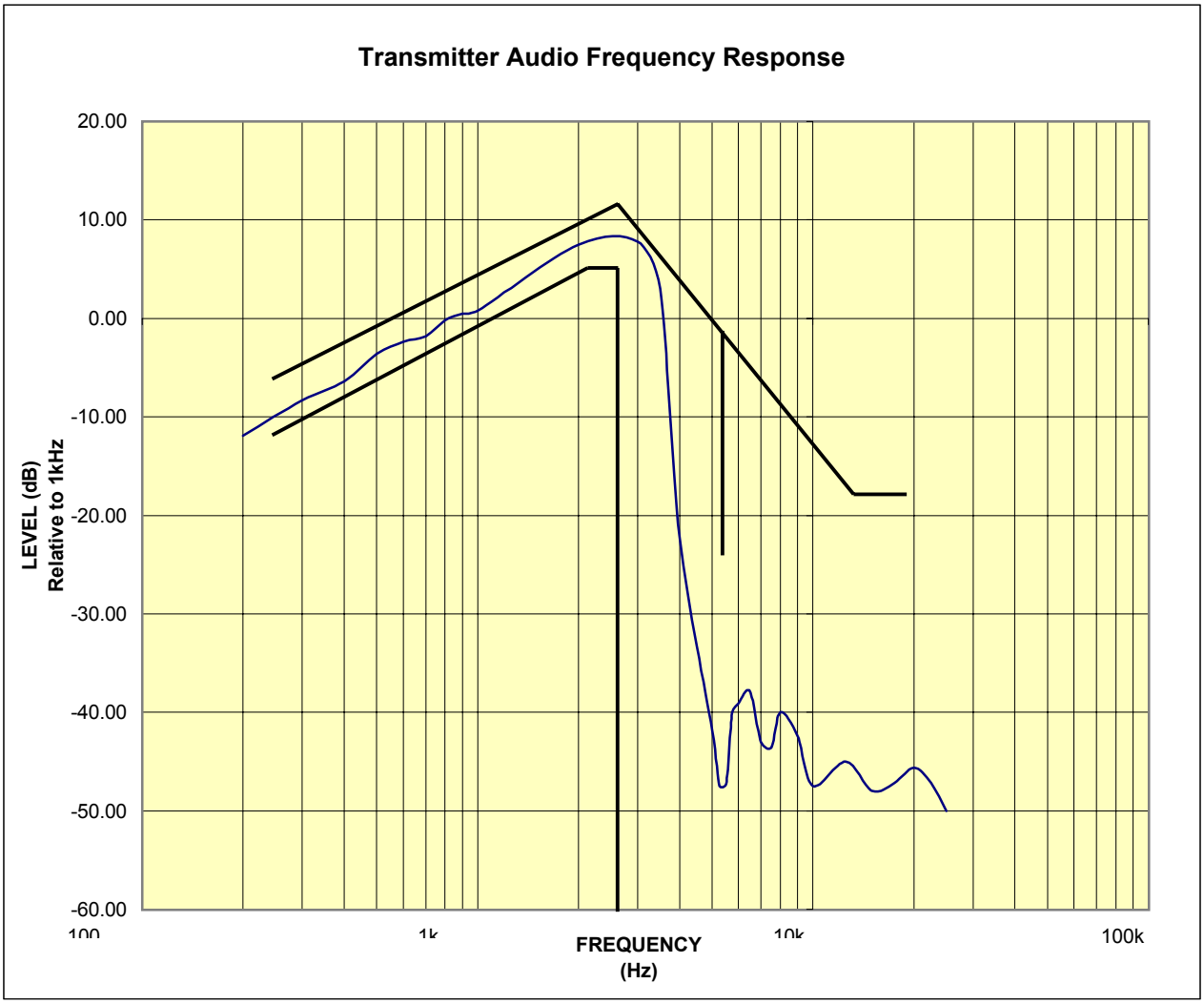


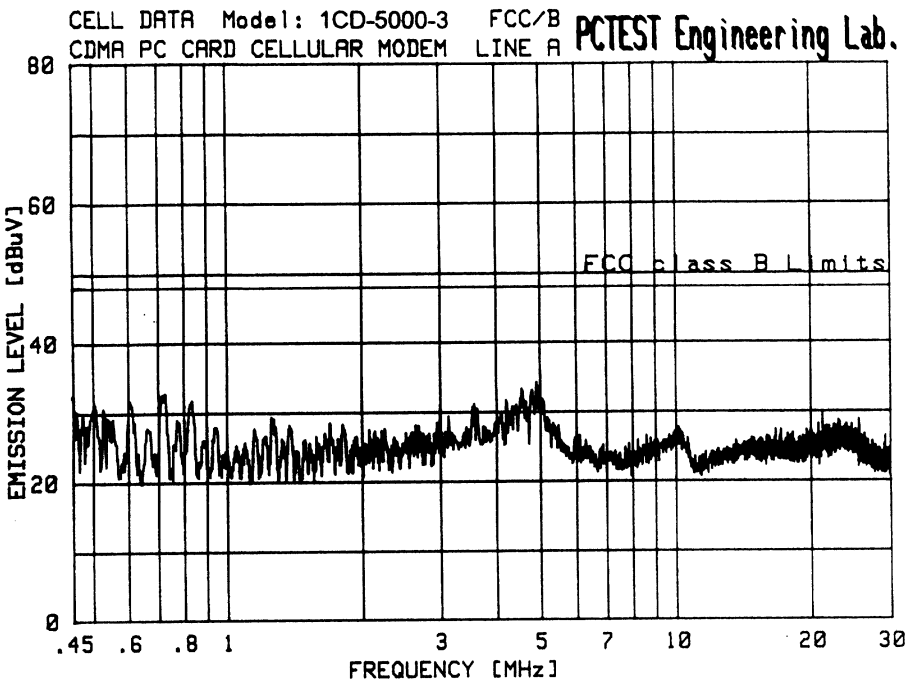
SUBJECT: Modulation Characteristics
FCC Part 22

Test Report No.:22.210423240.PNN
Test Date: 05. 30. 2001

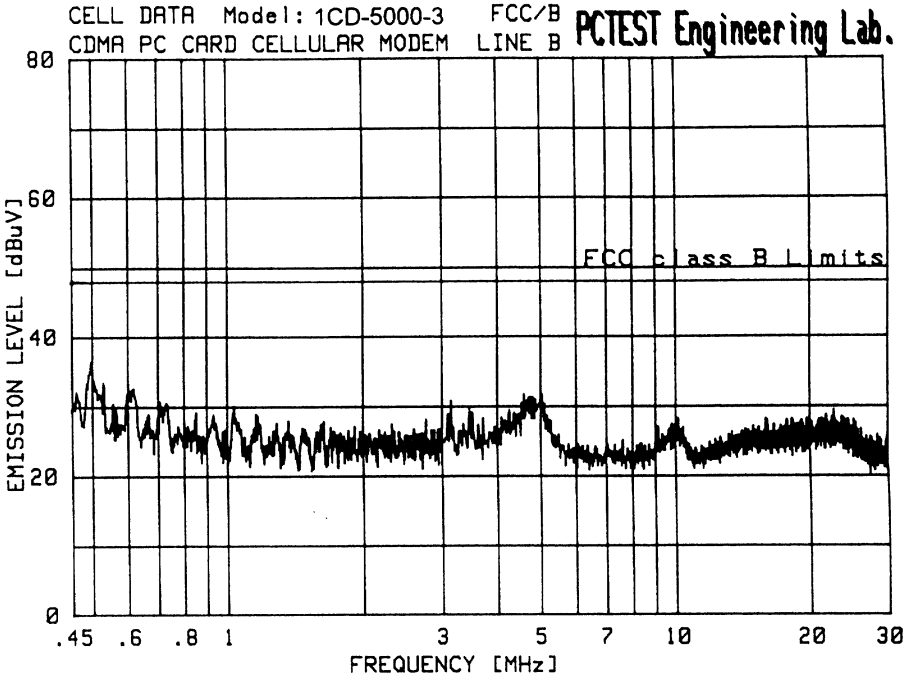
EUT: **CDMA Wireless Modem PC Card (PCMCIA)**
Model: *1CD-5000-3*
FCC ID: **PNN-CELL5000-3**

REFERENCE: 1 kHz = 0 dB





No.	Freq. [MHz]	Quasi-Pk [dBuV]	Average [dBuV]	QP-AV [dB]	Emission [dBuV]	Limit [dBuV]	Margin [dB]
1	4.884	28.10	-	-	28.10	48.00	-19.90
2	4.525	27.18	-	-	27.18	48.00	-20.82
3	4.847	27.67	-	-	27.67	48.00	-20.33
4	.713	31.11	-	-	31.11	48.00	-16.89
5	.451	25.68	-	-	25.68	48.00	-22.32
6	.825	29.28	-	-	29.28	48.00	-18.72
7	.502	29.47	-	-	29.47	48.00	-18.53
8	.597	30.44	-	-	30.44	48.00	-17.56
9	4.274	25.93	-	-	25.93	48.00	-22.07
10	3.516	24.13	-	-	24.13	48.00	-23.87



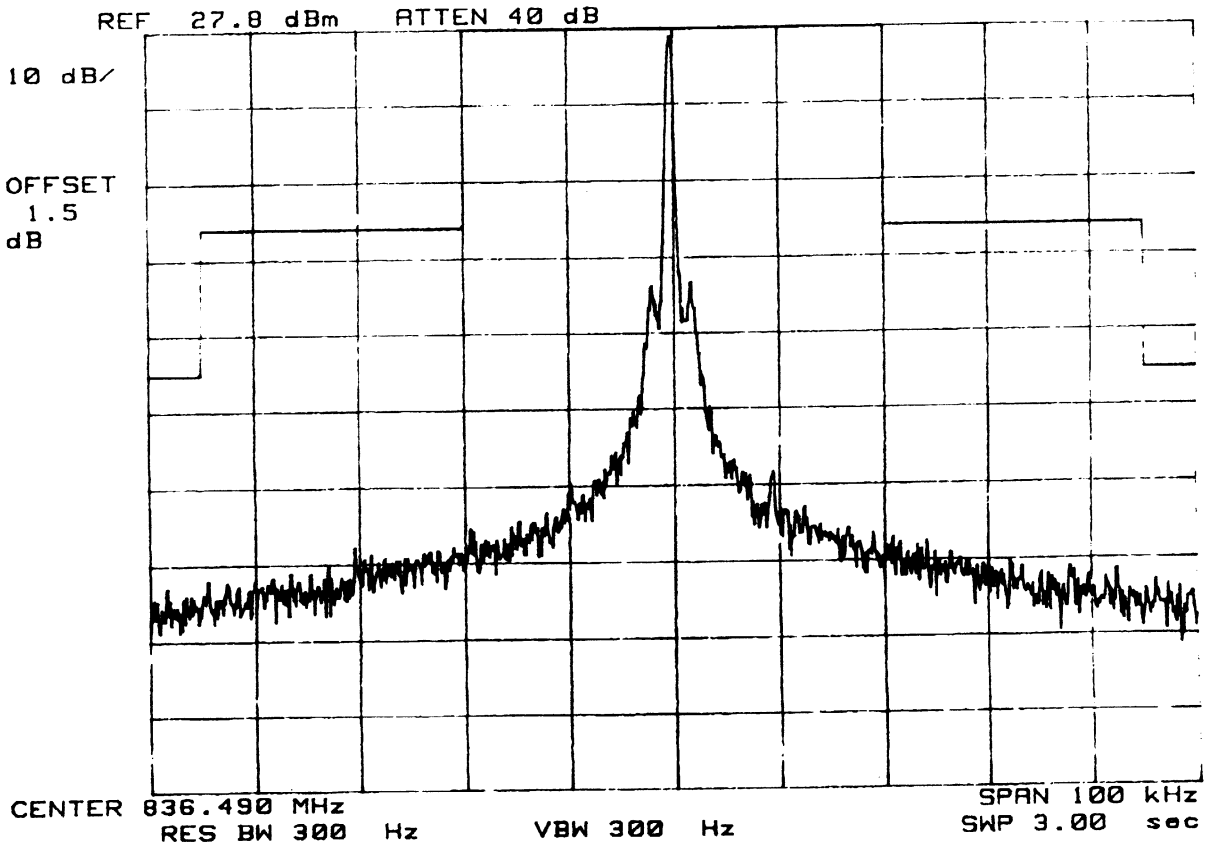
No.	Freq. [MHz]	Quasi-Pk [dBuV]	Average [dBuV]	QP-AV [dB]	Emission [dBuV]	Limit [dBuV]	Margin [dB]
1	.489	31.70	-	-	31.70	48.00	-16.30
2	.503	29.77	-	-	29.77	48.00	-18.23
3	.600	30.71	-	-	30.71	48.00	-17.29
4	.451	28.23	-	-	28.23	48.00	-19.77
5	4.691	27.55	-	-	27.55	48.00	-20.45
6	5.020	27.81	-	-	27.81	48.00	-20.19
7	3.181	23.75	-	-	23.75	48.00	-24.25
8	.711	27.25	-	-	27.25	48.00	-20.75
9	.729	27.69	-	-	27.69	48.00	-20.31
10	.542	27.33	-	-	27.33	48.00	-20.67

PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:PNN-CELL5000-3
FM MODE
CH-8383
Operating Frequency: 836.498 MHz
Output Power 27.8 dBm

Test Mode:Unmodulated Signal

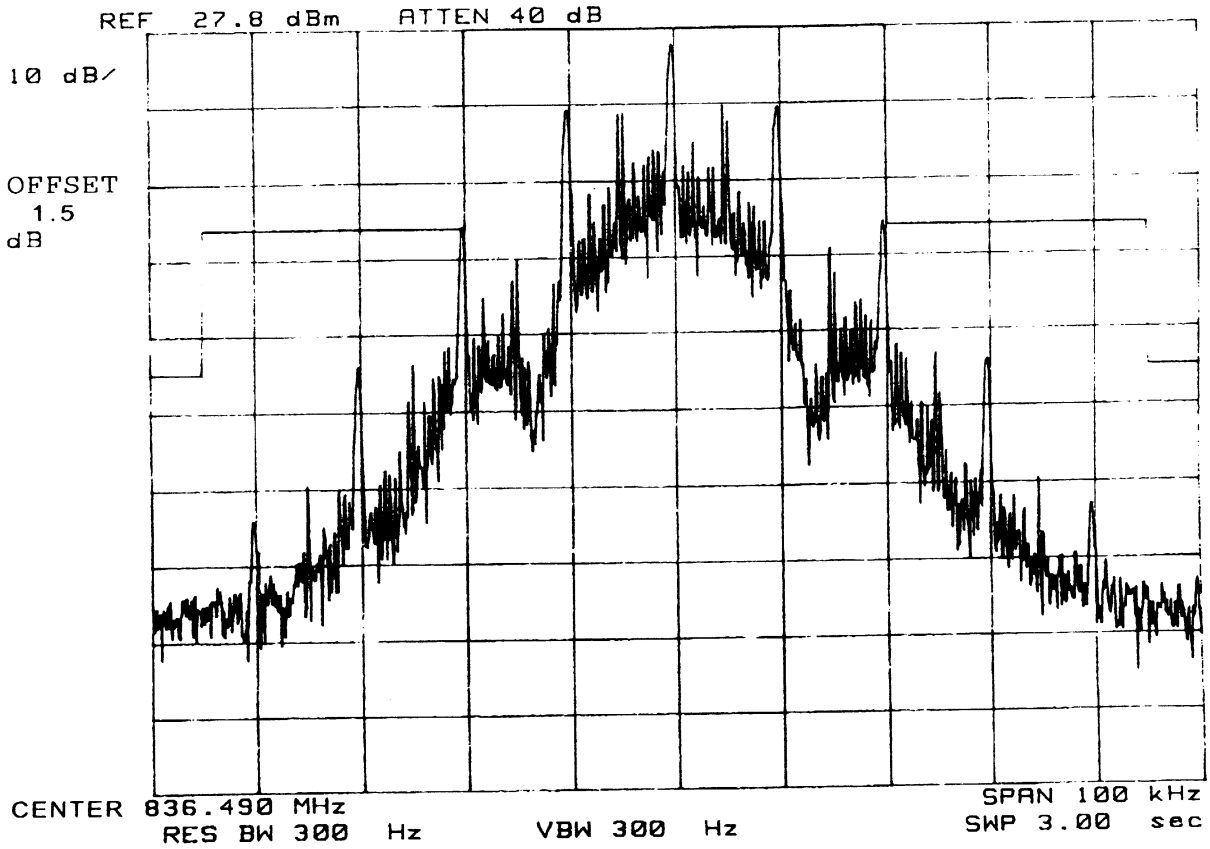


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:PNN-CELL5000-3
FM MODE
CH-8383
Operating Frequency: 836.498 MHz
Output Power 27.8 dBm

Test Mode:Wide Band Data

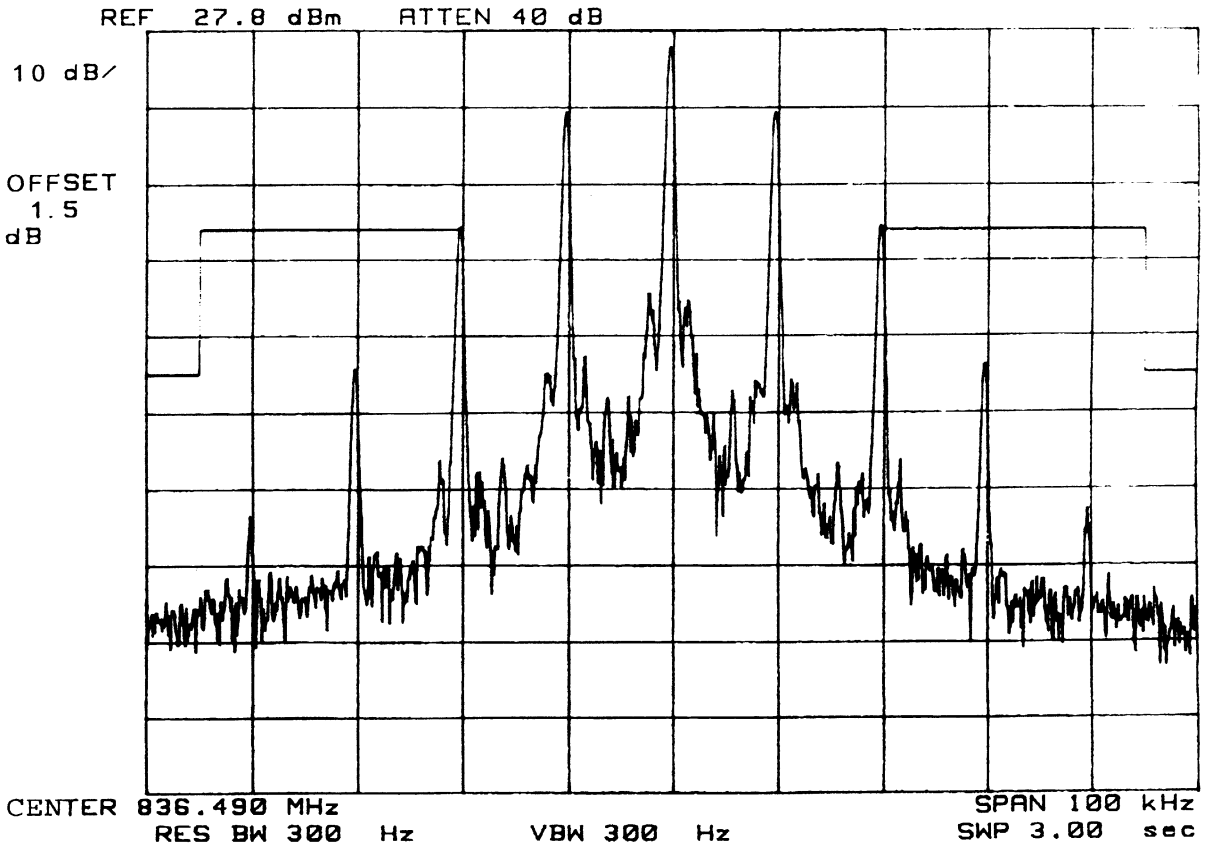


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:PNN-CELL5000-3
FM MODE
CH-8383
Operating Frequency: 836.498 MHz
Output Power 27.8 dBm

Test Mode:ST

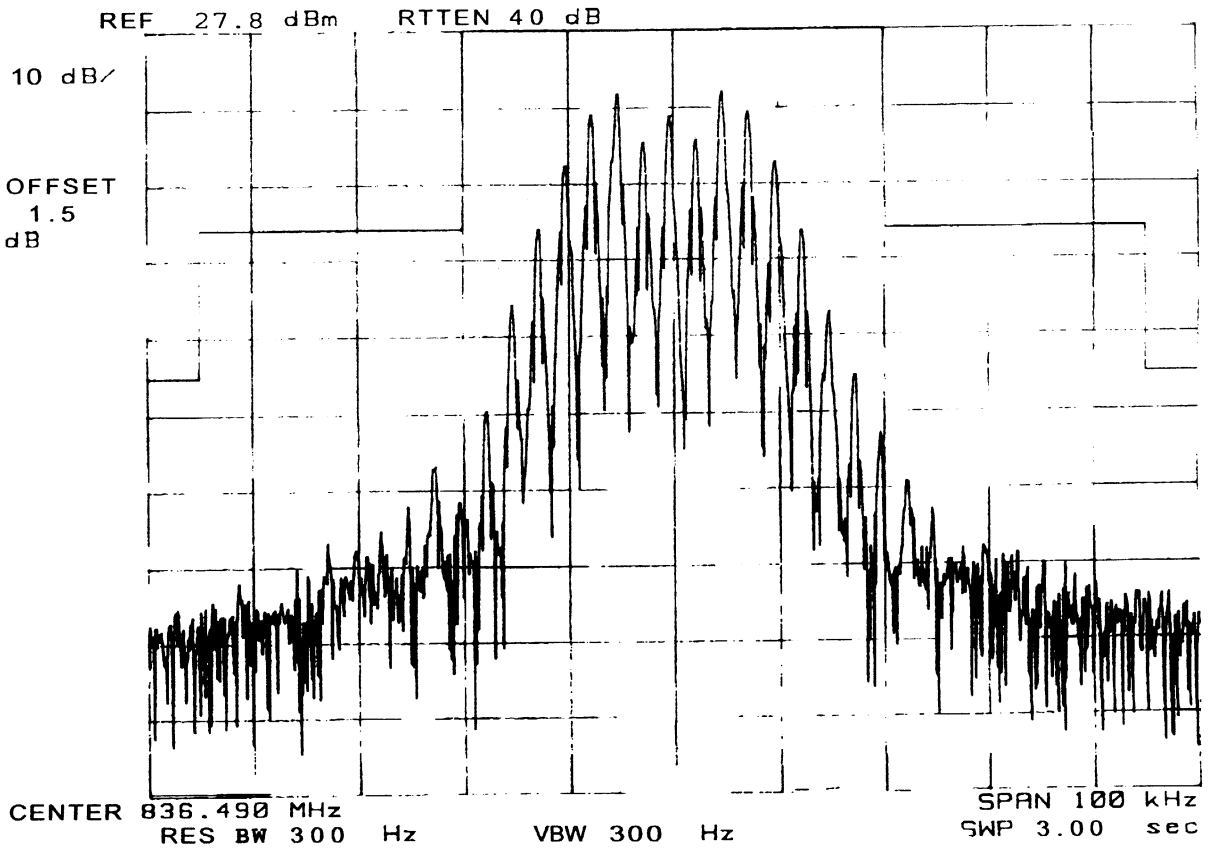


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:PNN-CELL5000-3
FM MODE
CH-8383
Operating Frequency: 836.498 MHz
Output Power 27.8 dBm

Test Mode: Voice

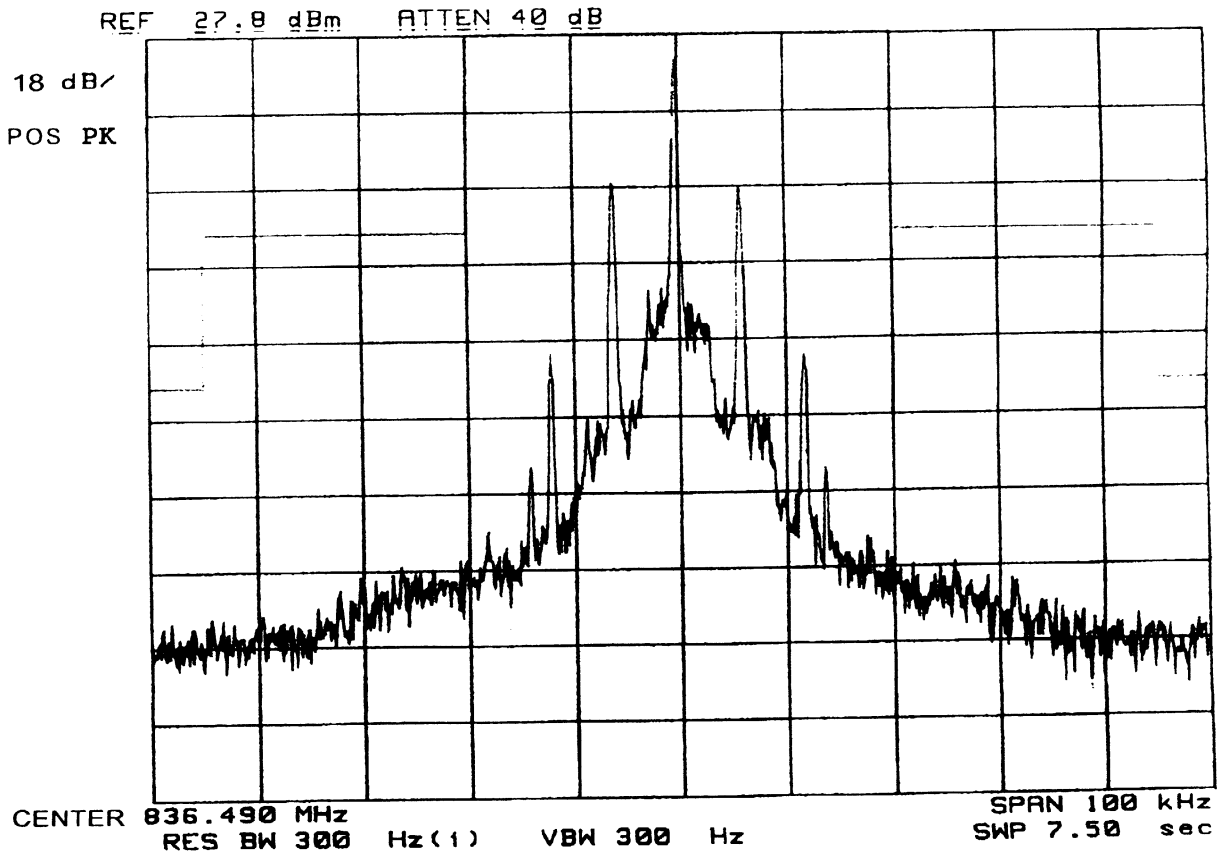


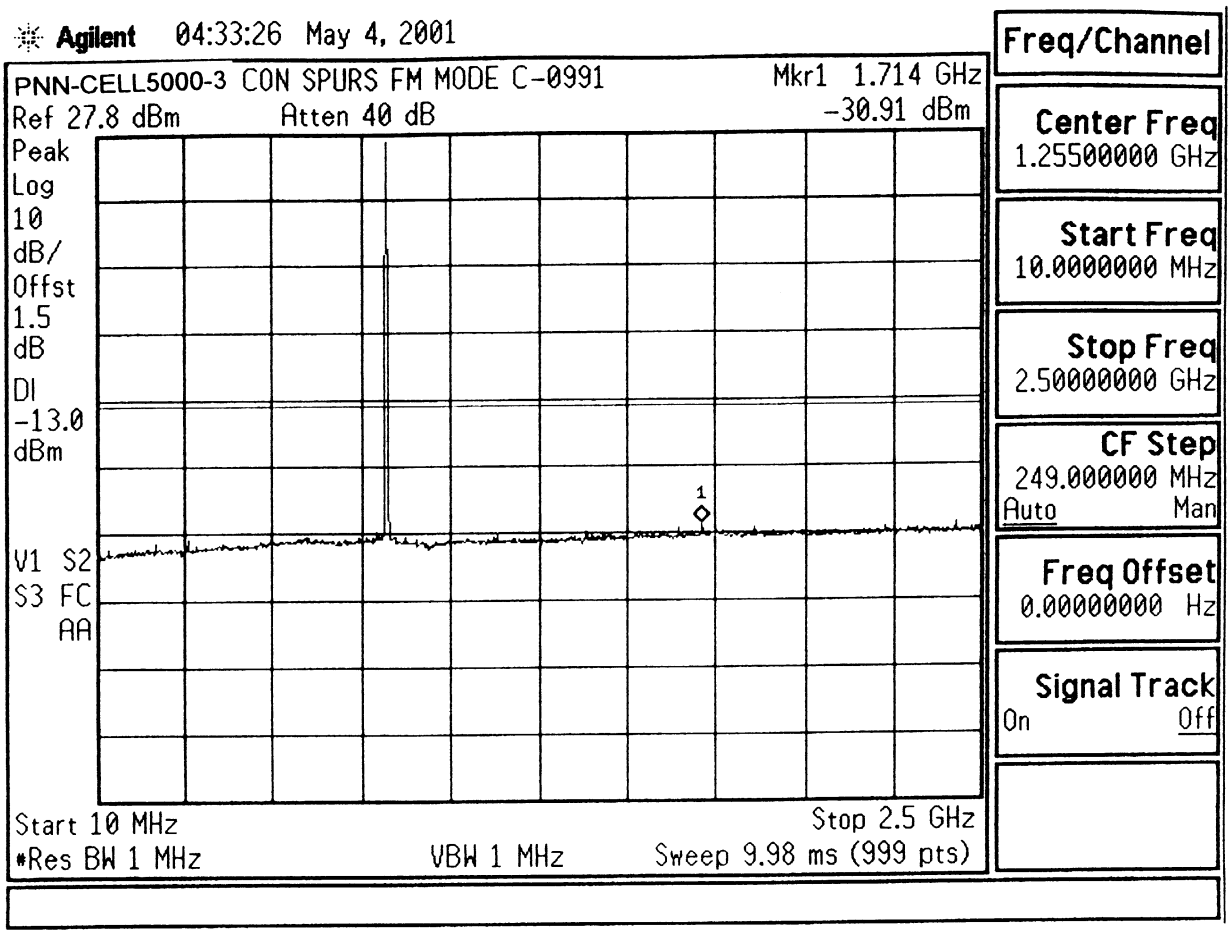
PCTEST Engineering Lab.

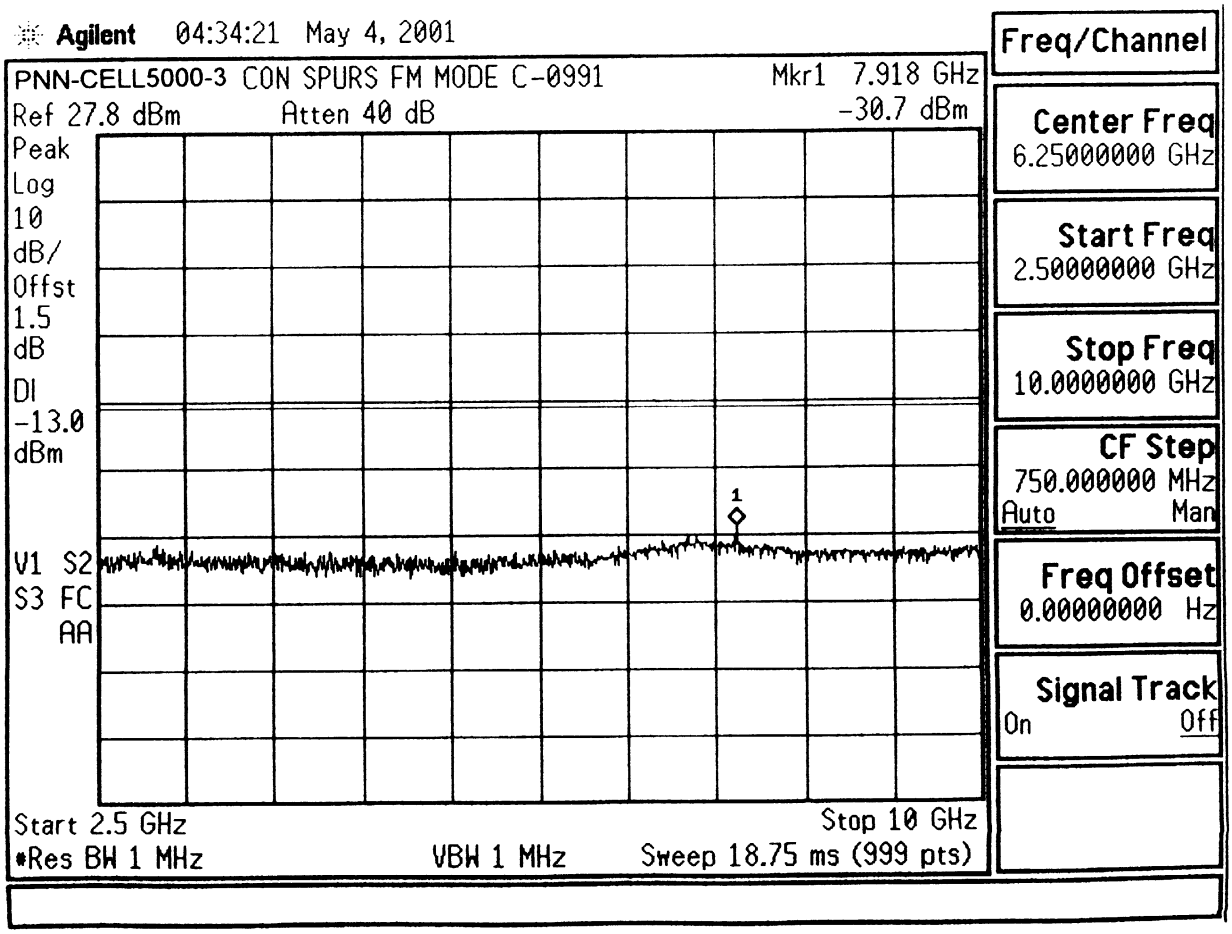
SPECTRUM ANALYZER PRESENTATION

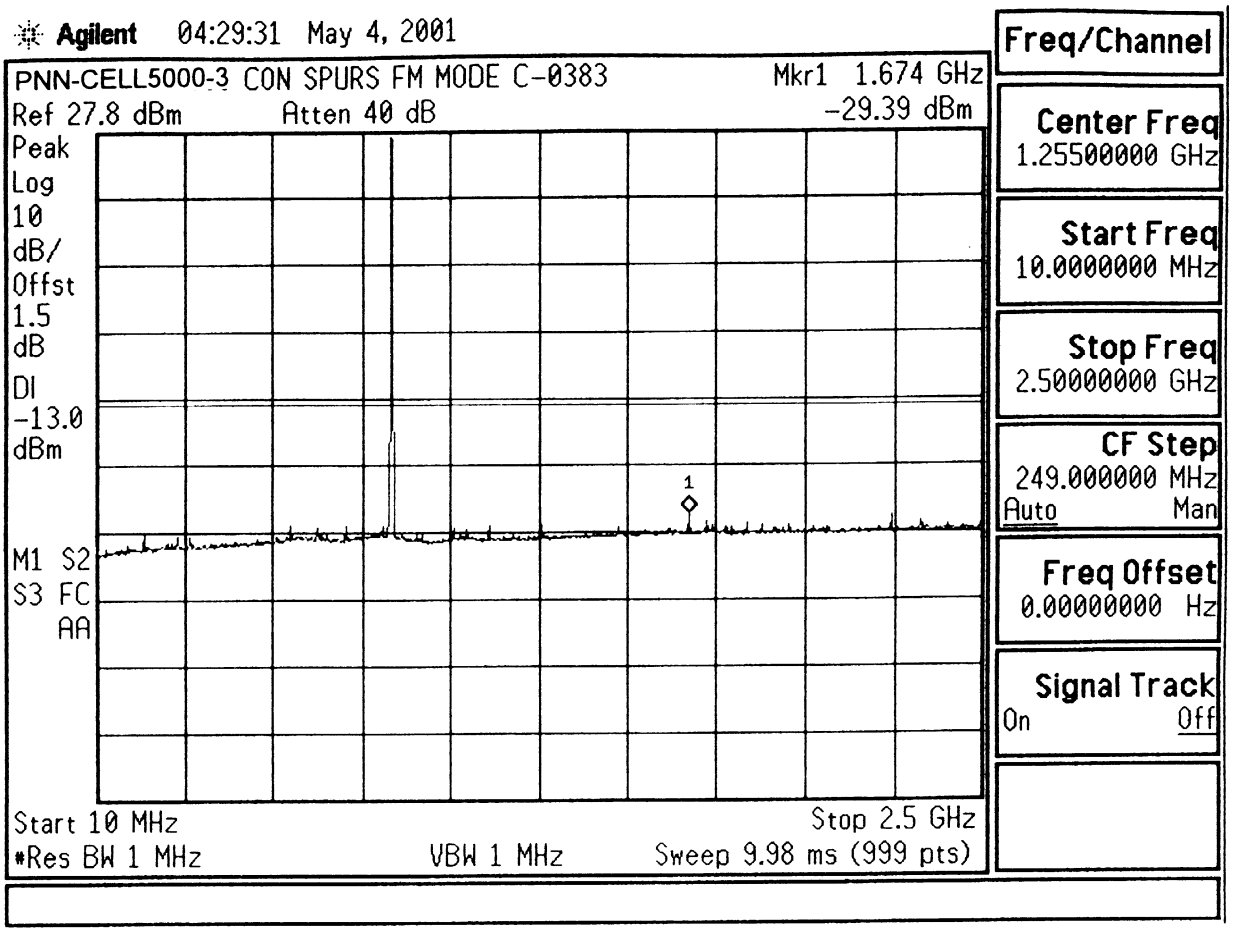
FCC 1D:PNN-CELL5000-3
FM MODE
CH-8383
Operating Frequency: 836.490 MHz
Output Power 27.8 dBm

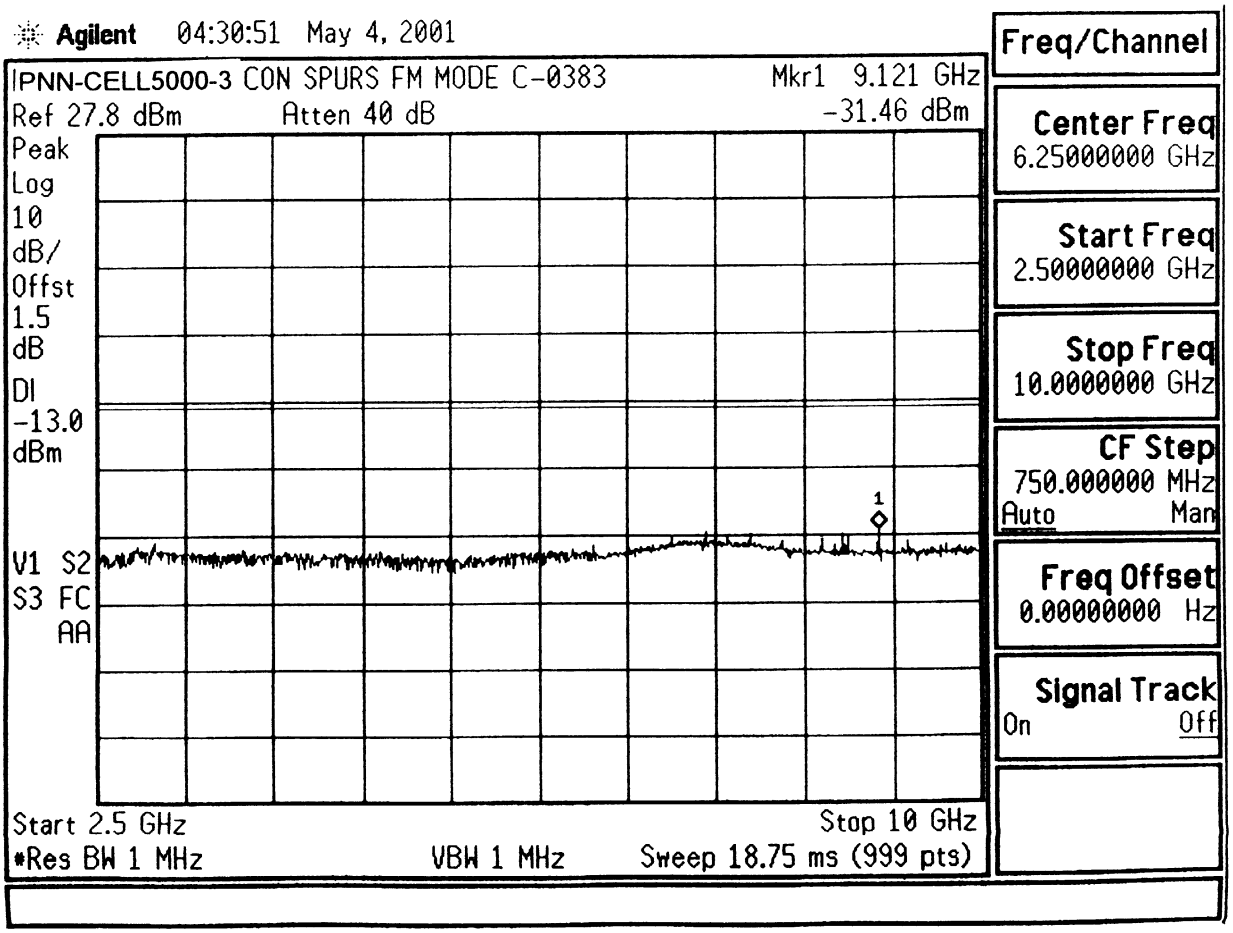
Test Mode: SAT

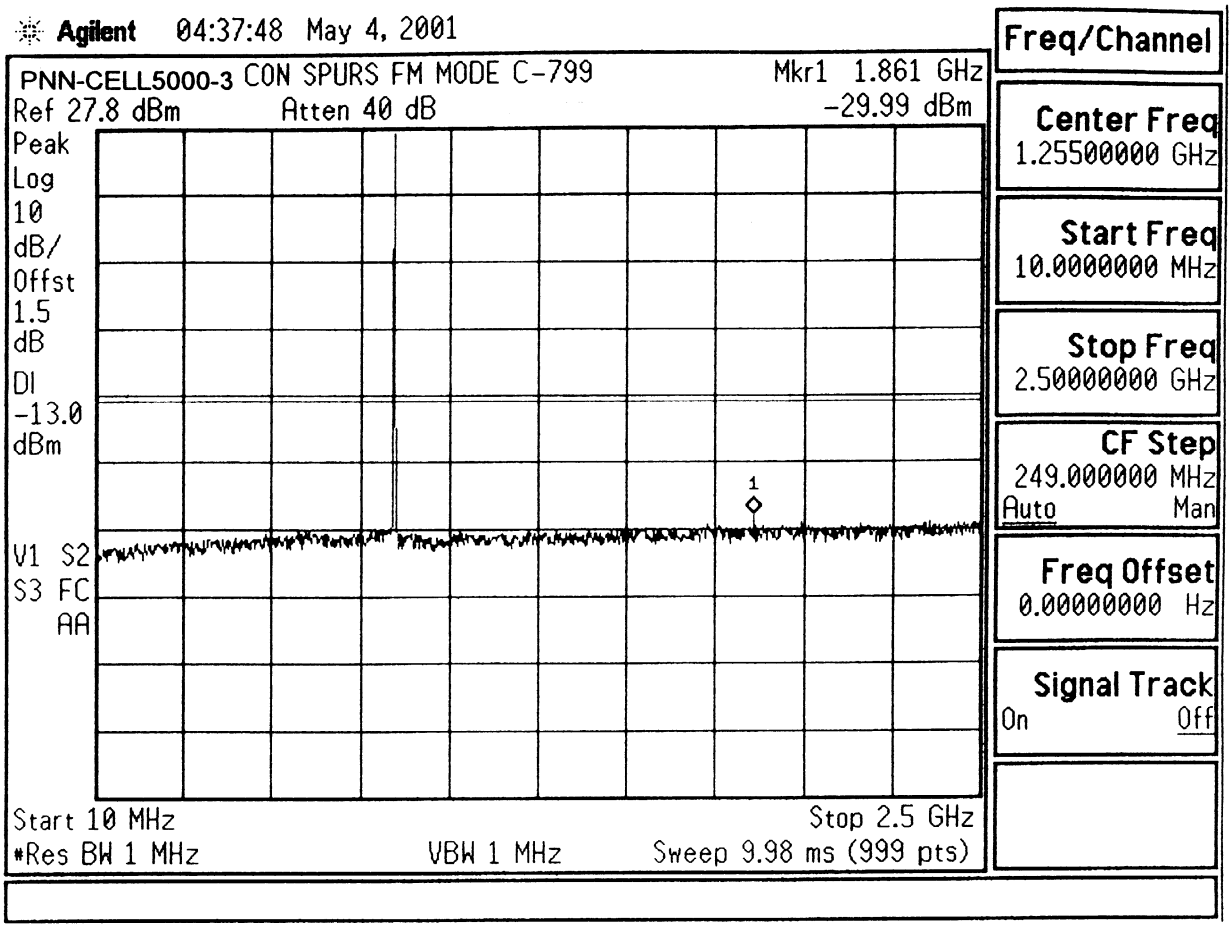


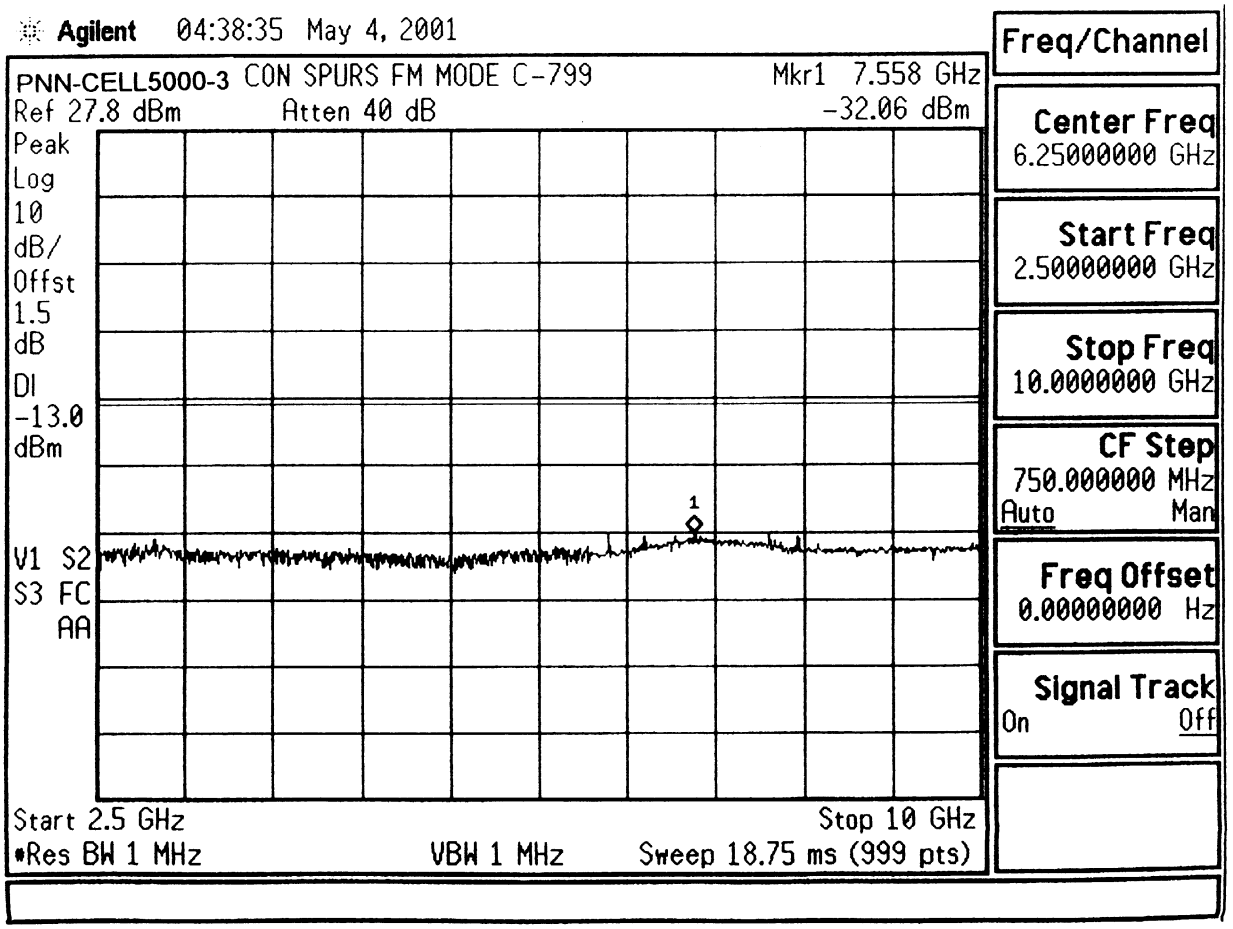

Agilent 04:33:26 May 4, 2001
PNN-CELL5000-3 CON SPURS FM MODE C-0991
Mkr1 1.714 GHz
-30.91 dBm
Ref 27.8 dBm
Atten 40 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

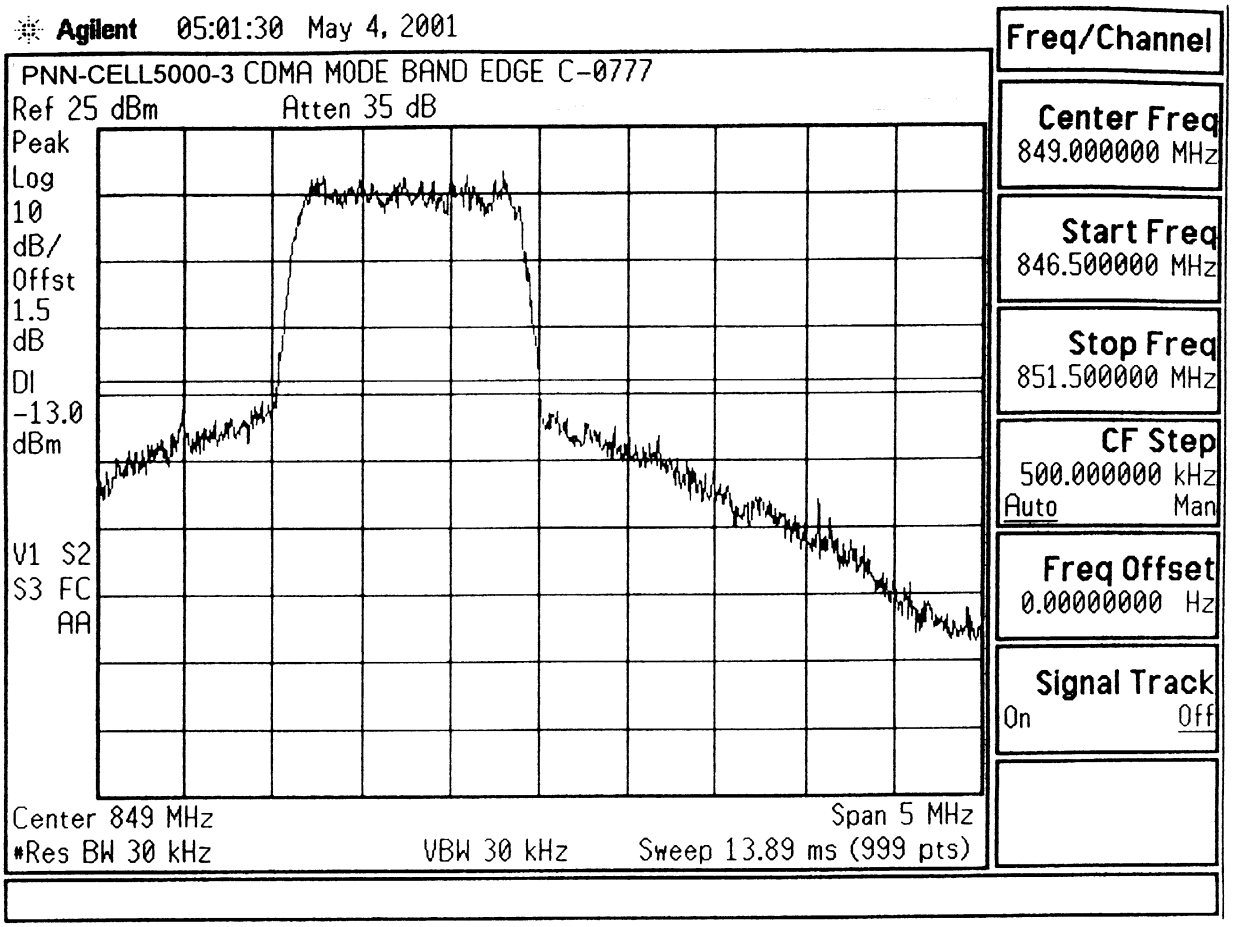

Agilent 04:34:21 May 4, 2001
PNN-CELL5000-3 CON SPURS FM MODE C-0991
Mkr1 7.918 GHz
-30.7 dBm
Ref 27.8 dBm
Atten 40 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

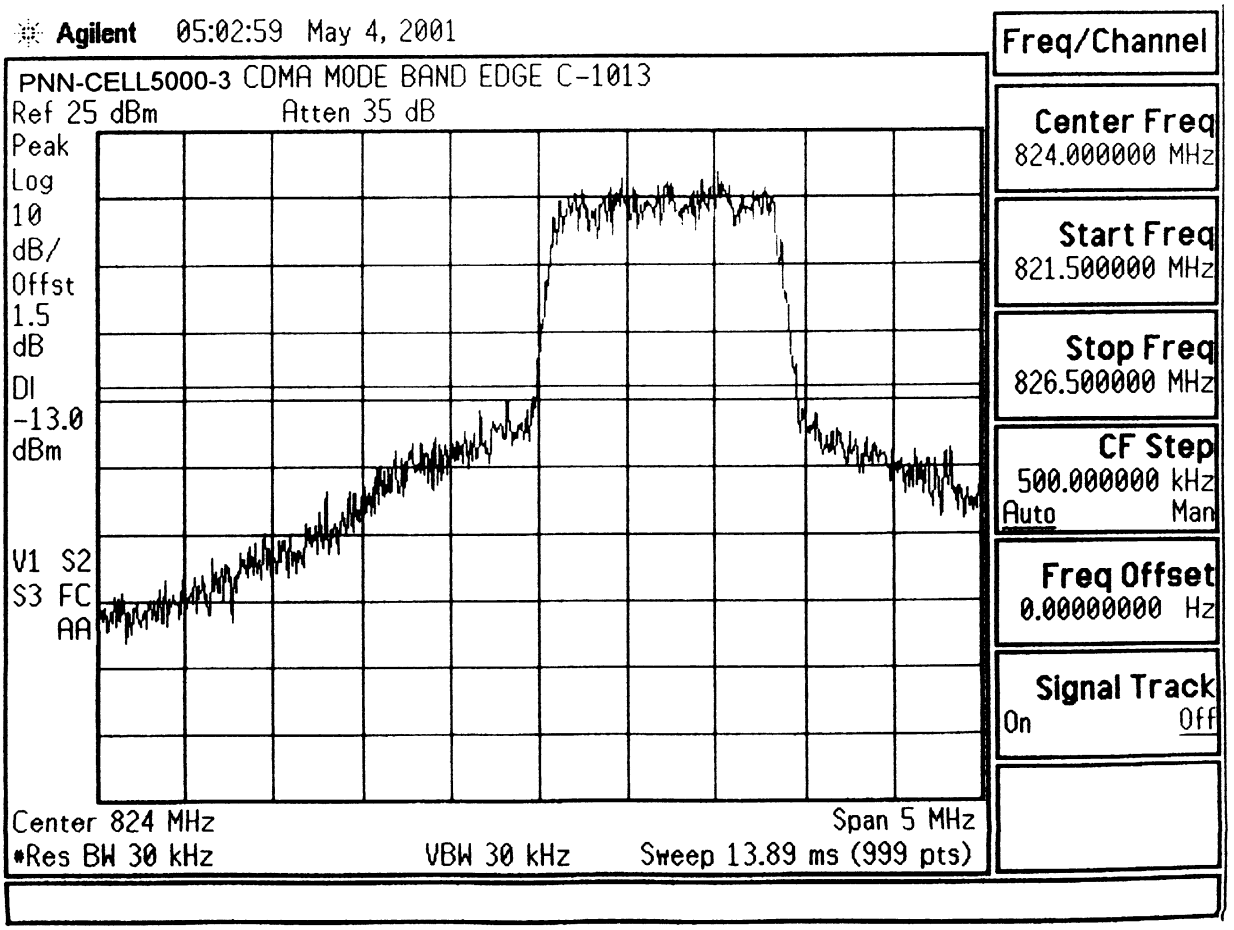

Agilent 04:29:31 May 4, 2001
PNN-CELL5000-3 CON SPURS FM MODE C-0383
Mkr1 1.674 GHz
Ref 27.8 dBm
Atten 40 dB
-29.39 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
M1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

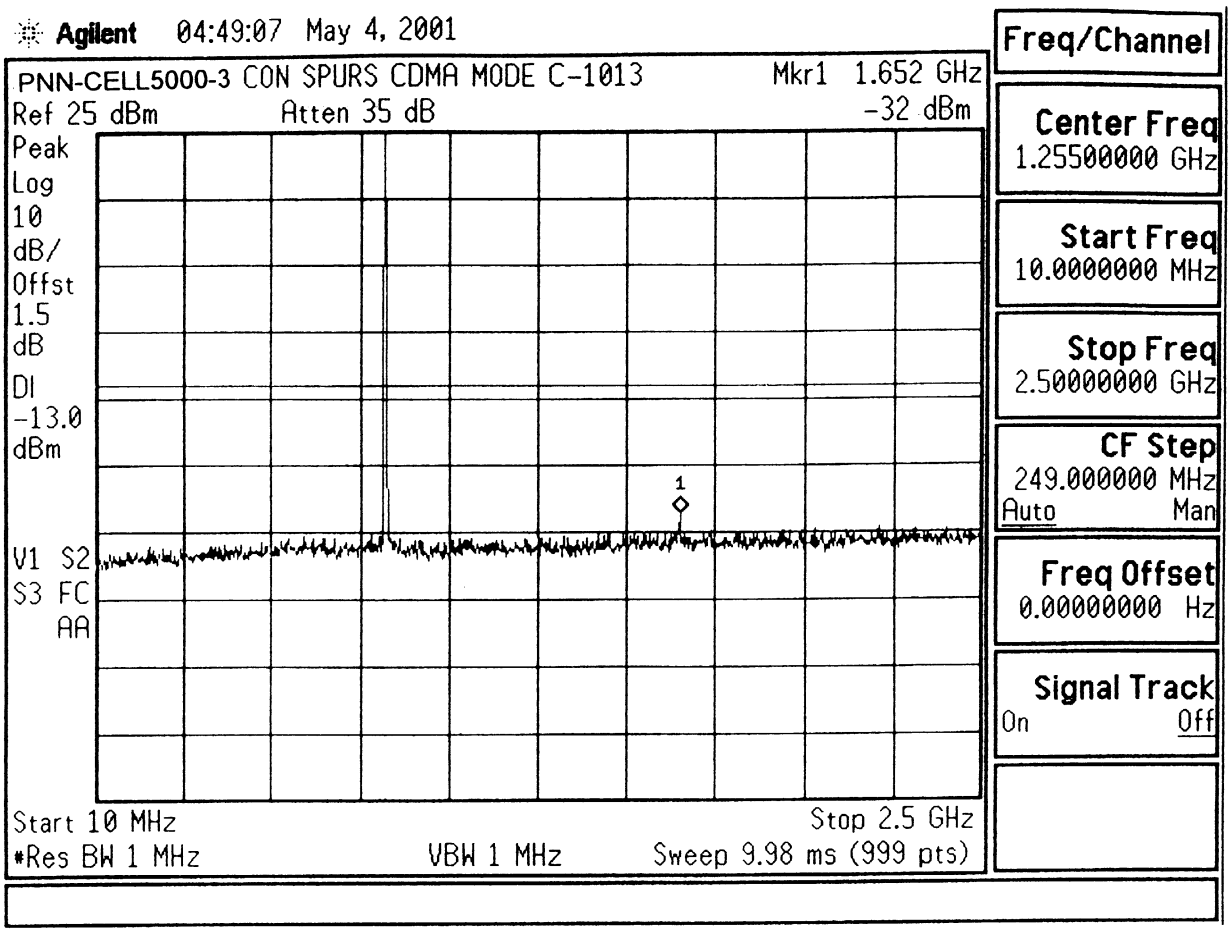

Agilent 04:30:51 May 4, 2001
IPNN-CELL5000-3 CON SPURS FM MODE C-0383
Mkr1 9.121 GHz
Ref 27.8 dBm
Atten 40 dB
-31.46 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

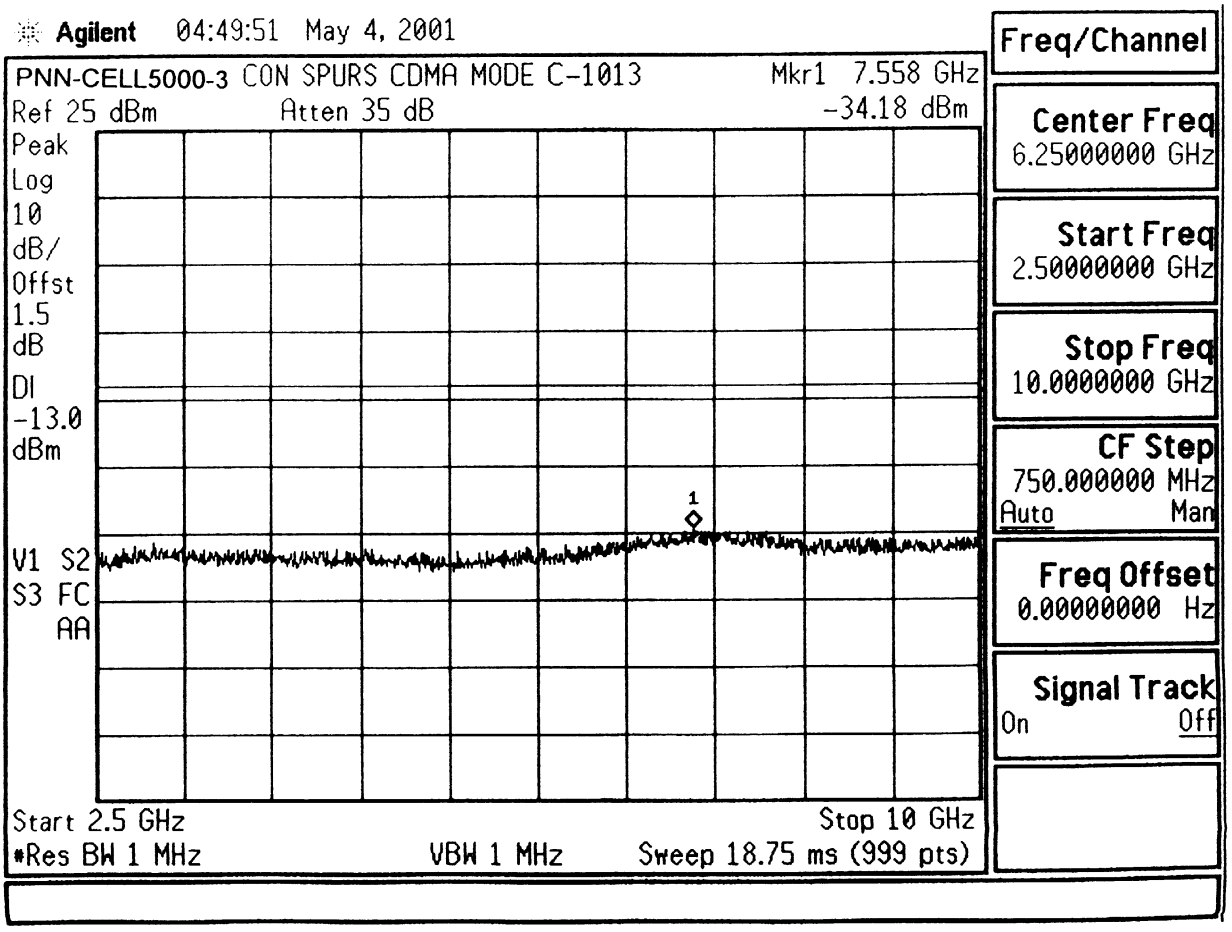

Agilent 04:37:48 May 4, 2001
PNN-CELL5000-3 CON SPURS FM MODE C-799
Mkr1 1.861 GHz
-29.99 dBm
Ref 27.8 dBm
Atten 40 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

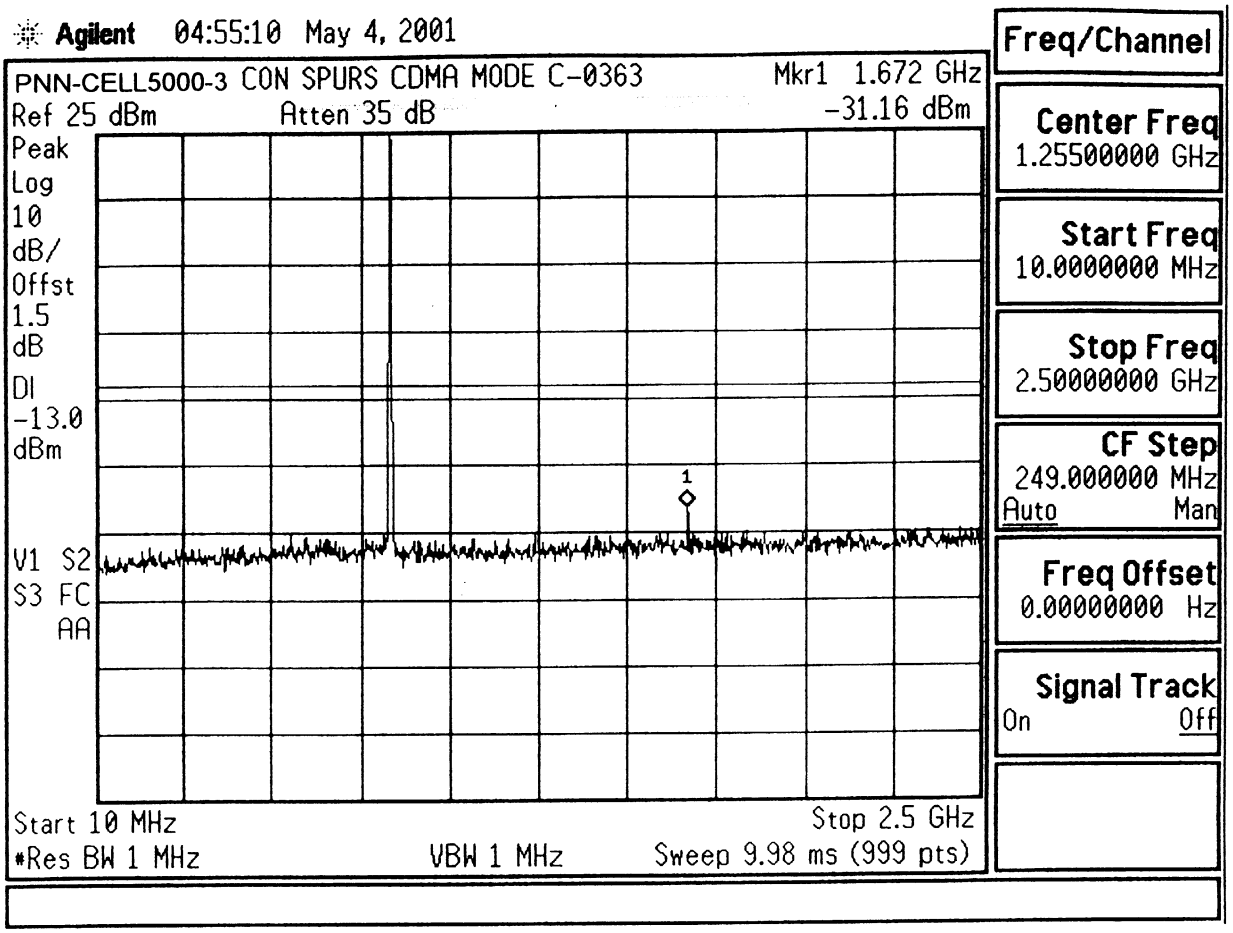

Agilent 04:38:35 May 4, 2001
PNN-CELL5000-3 CON SPURS FM MODE C-799
Mkr1 7.558 GHz
-32.06 dBm
Ref 27.8 dBm
Atten 40 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

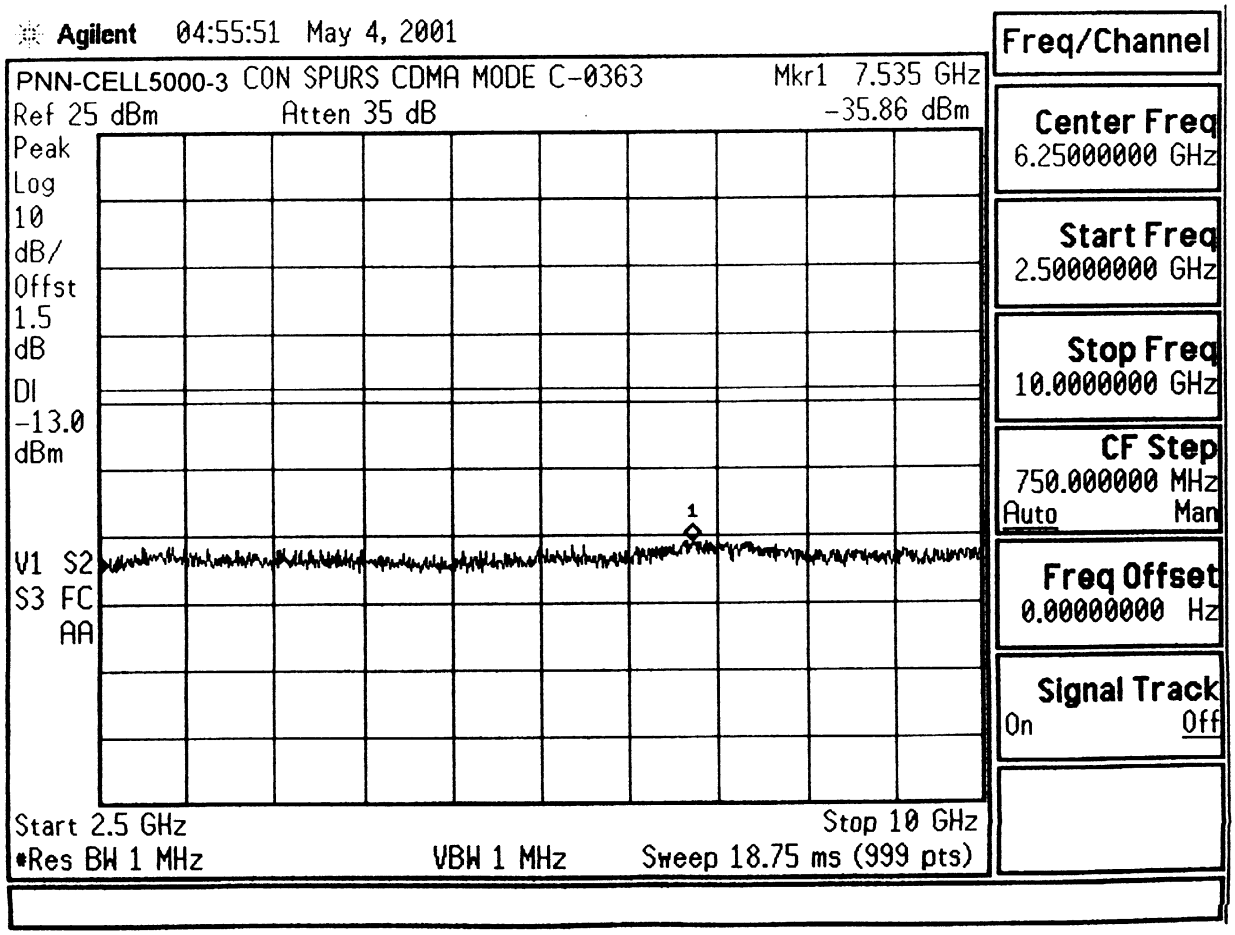

Agilent 05:01:30 May 4, 2001
PNN-CELL5000-3 CDMA MODE BAND EDGE C-0777
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 849 MHz
Span 5 MHz
*Res BW 30 kHz
VBW 30 kHz
Sweep 13.89 ms (999 pts)
Freq/Channel
Center Freq
849.000000 MHz
Start Freq
846.500000 MHz
Stop Freq
851.500000 MHz
CF Step
500.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

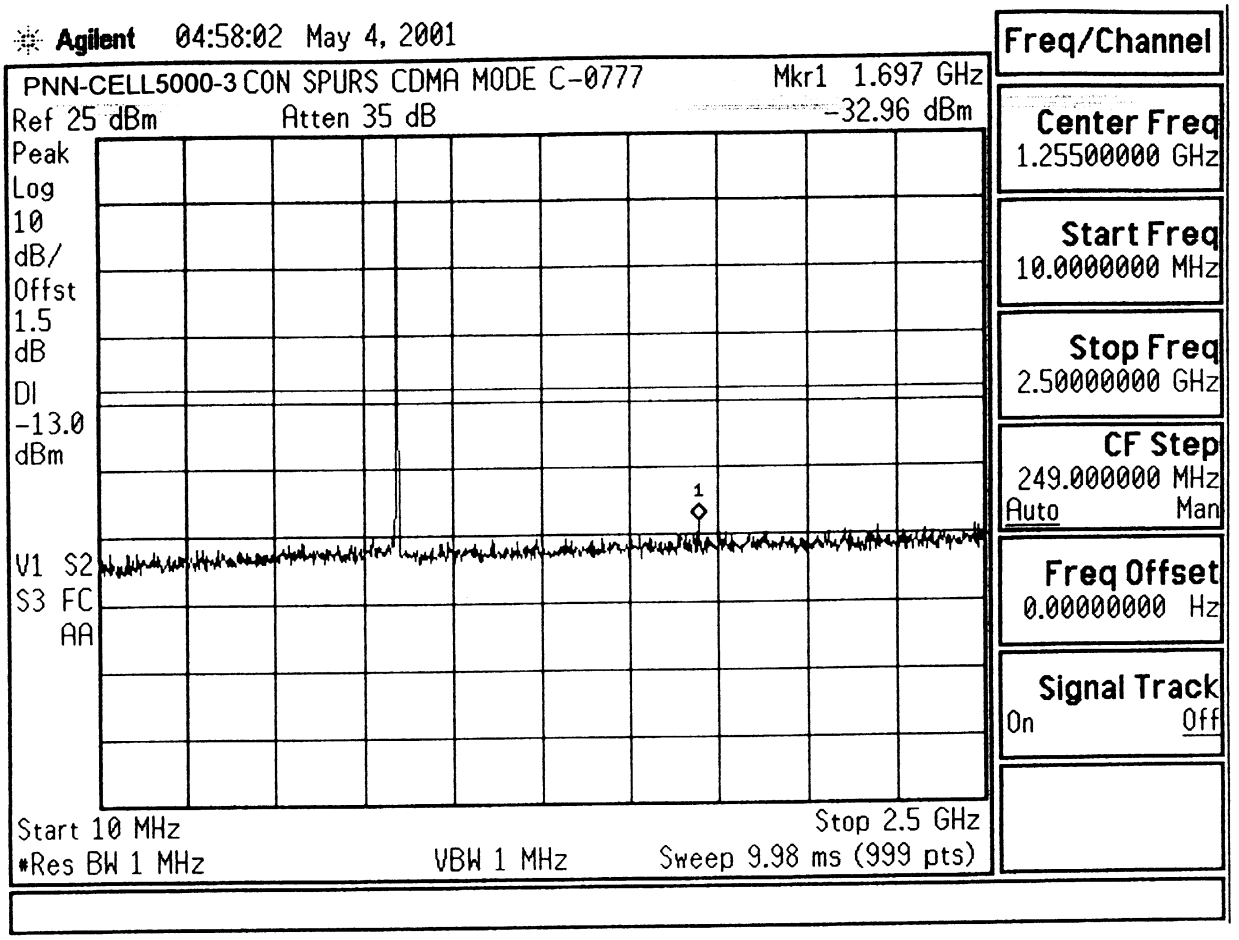

Agilent 05:02:59 May 4, 2001
PNN-CELL5000-3 CDMA MODE BAND EDGE C-1013
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 824 MHz
Span 5 MHz
*Res BW 30 kHz
VBW 30 kHz
Sweep 13.89 ms (999 pts)
Freq/Channel
Center Freq
824.000000 MHz
Start Freq
821.500000 MHz
Stop Freq
826.500000 MHz
CF Step
500.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

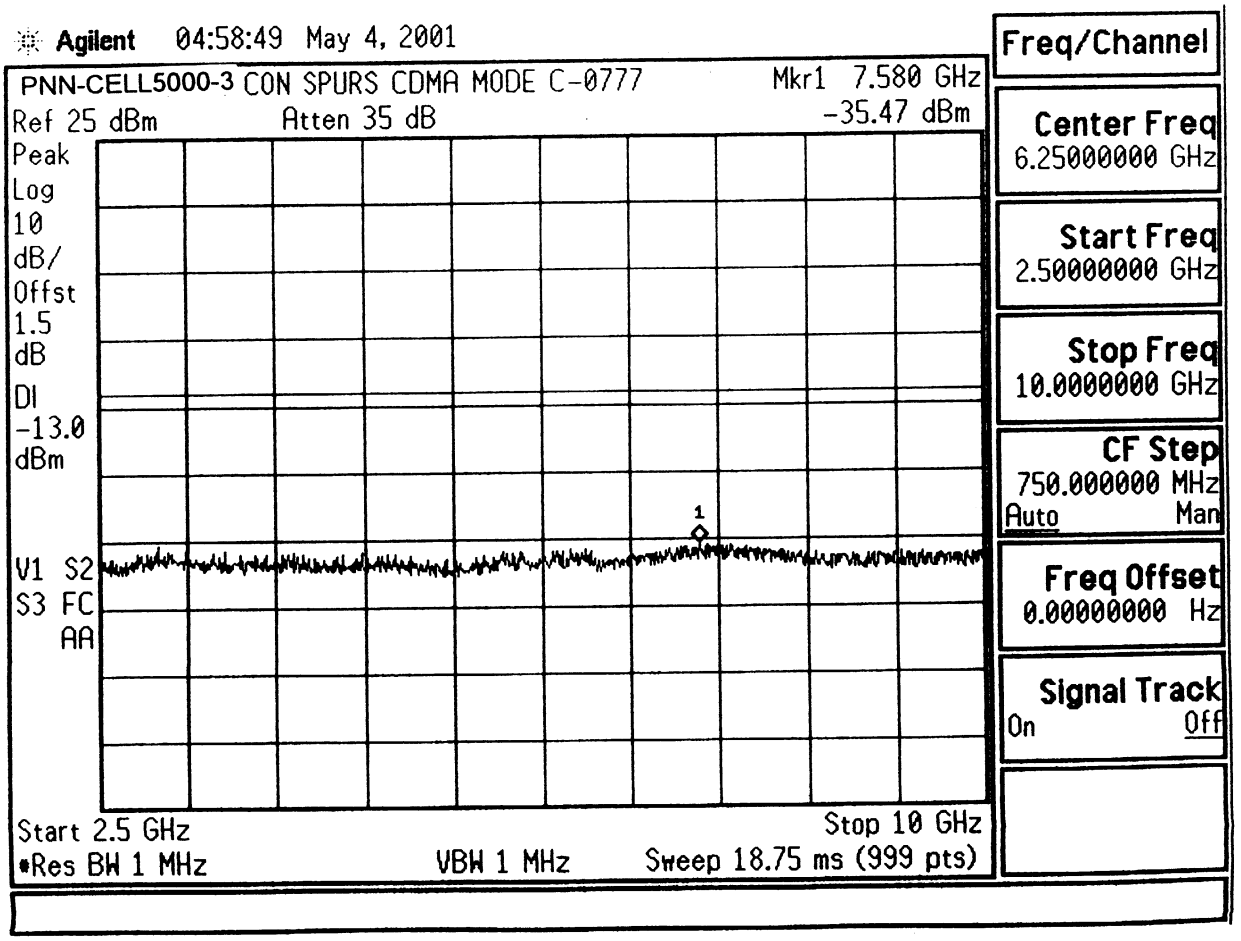

Agilent 04:49:07 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-1013
Mkr1 1.652 GHz
-32 dBm
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off


Agilent 04:49:51 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-1013
Mkr1 7.558 GHz
-34.18 dBm
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off


Agilent 04:55:10 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-0363
Mkr1 1.672 GHz
Ref 25 dBm
Atten 35 dB
-31.16 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off


Agilent 04:55:51 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-0363
Mkr1 7.535 GHz
Ref 25 dBm
Atten 35 dB
-35.86 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off


Agilent 04:58:02 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-0777
Mkr1 1.697 GHz
-32.96 dBm
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.5 GHz
Sweep 9.98 ms (999 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off


Agilent 04:58:49 May 4, 2001
PNN-CELL5000-3 CON SPURS CDMA MODE C-0777
Mkr1 7.580 GHz
-35.47 dBm
Ref 25 dBm
Atten 35 dB
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 10 GHz
Sweep 18.75 ms (999 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off