

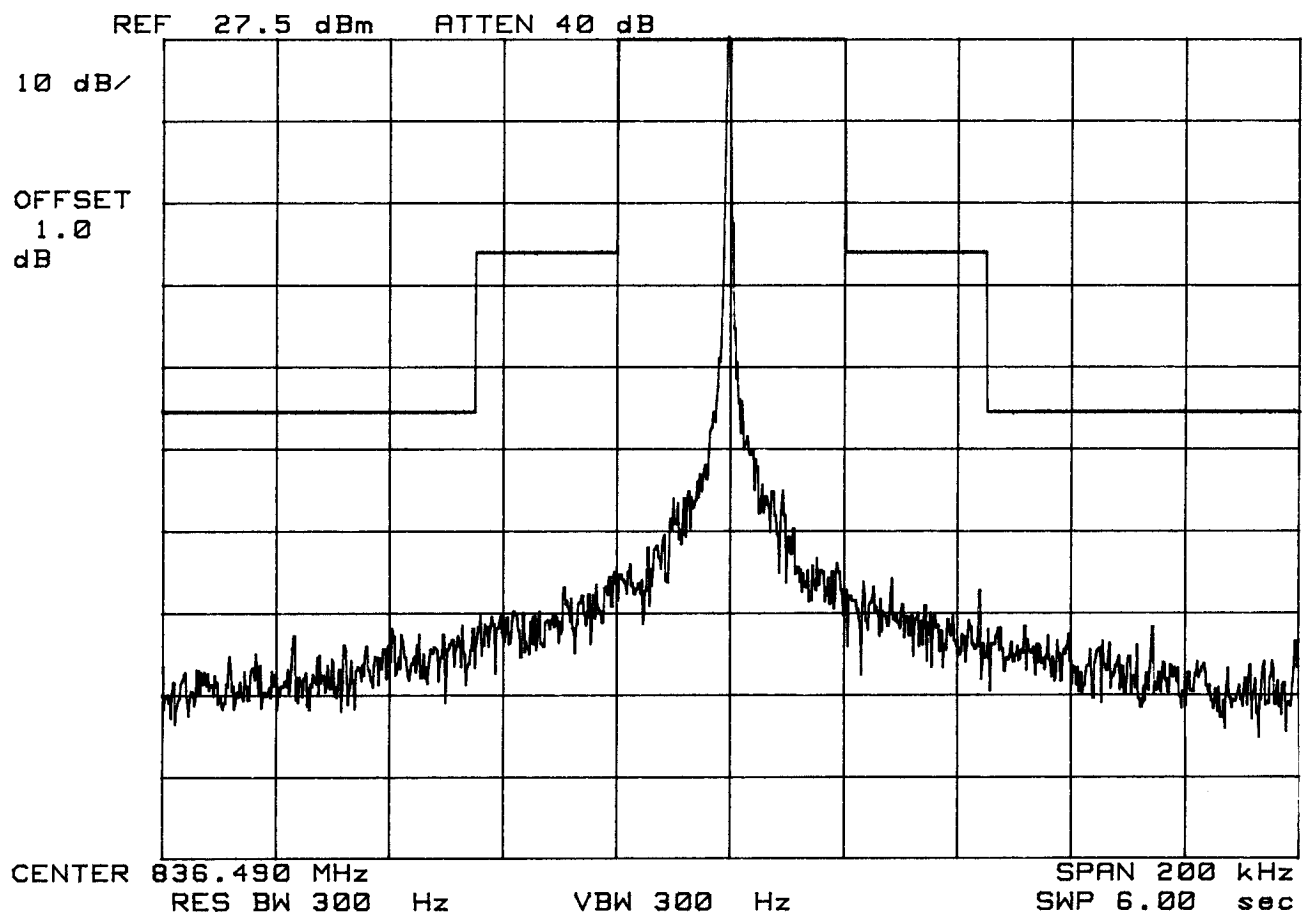
ATTACHMENT D – TEST PLOTS

PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B
HYUNDAI TRI-MODE PHONE
FM MODE
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 27.5 dBm

Test Mode:Unmodulated Signal

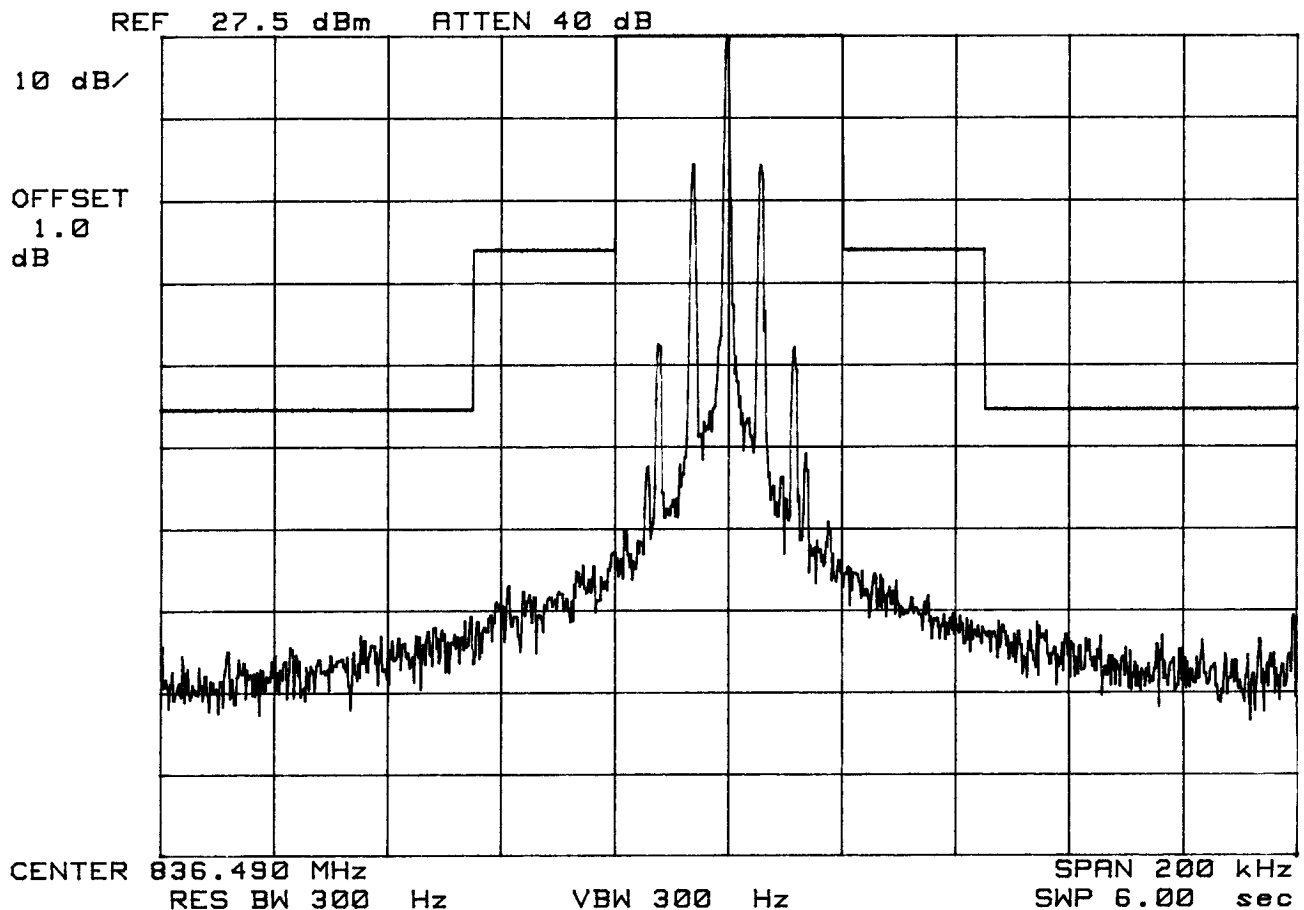


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B
HYUNDAI TRI-MODE PHONE
FM MODE
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 27.5 dBm

Test Mode:SAT



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B

HYUNDAI TRI-MODE PHONE

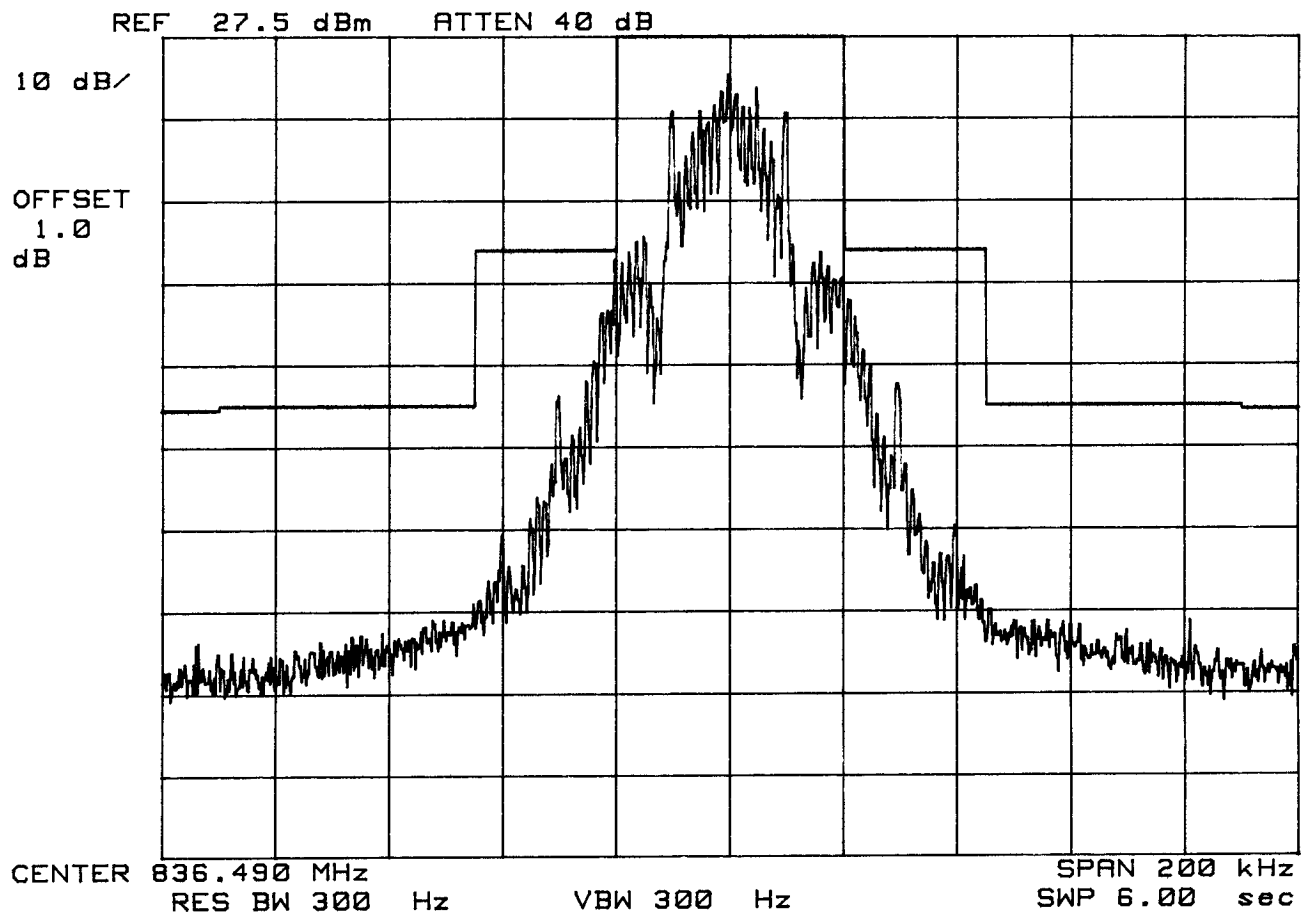
FM MODE

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 27.5 dBm

Test Mode:Wide Band Data



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B

HYUNDAI TRI-MODE PHONE

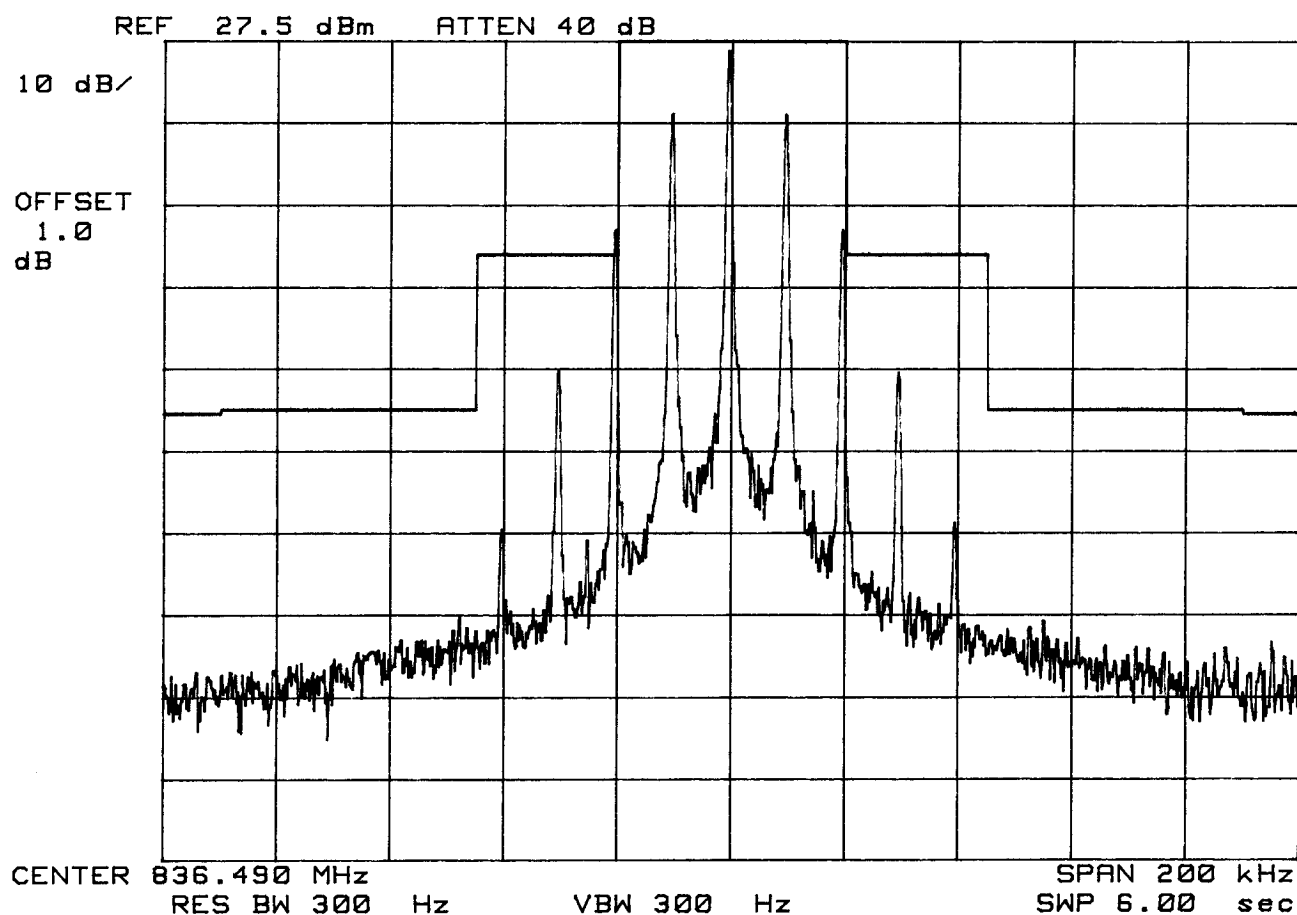
FM MODE

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 27.5 dBm

Test Mode:ST

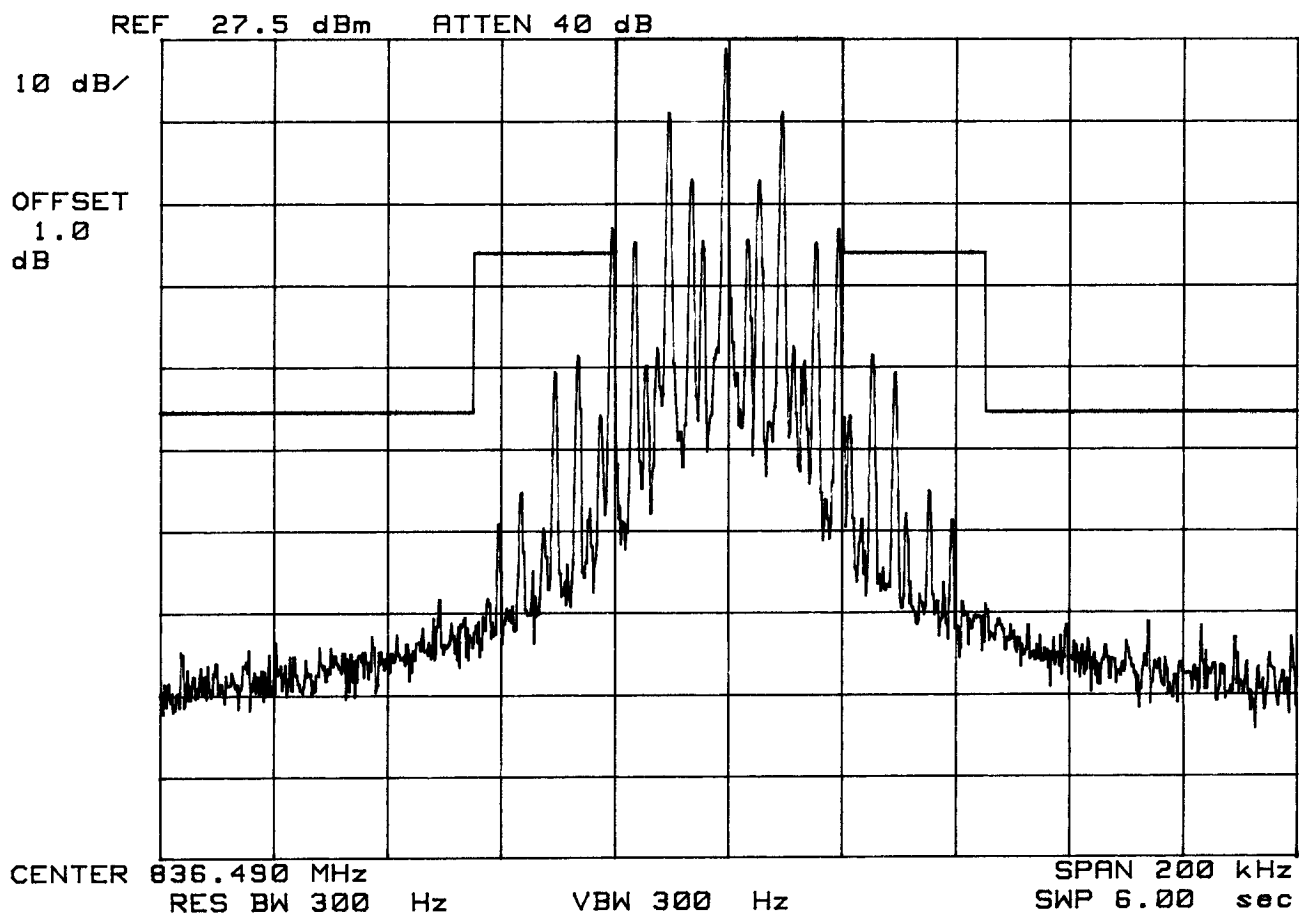


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B
HYUNDAI TRI-MODE PHONE
FM MODE
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 27.5 dBm

Test Mode:SAT + ST

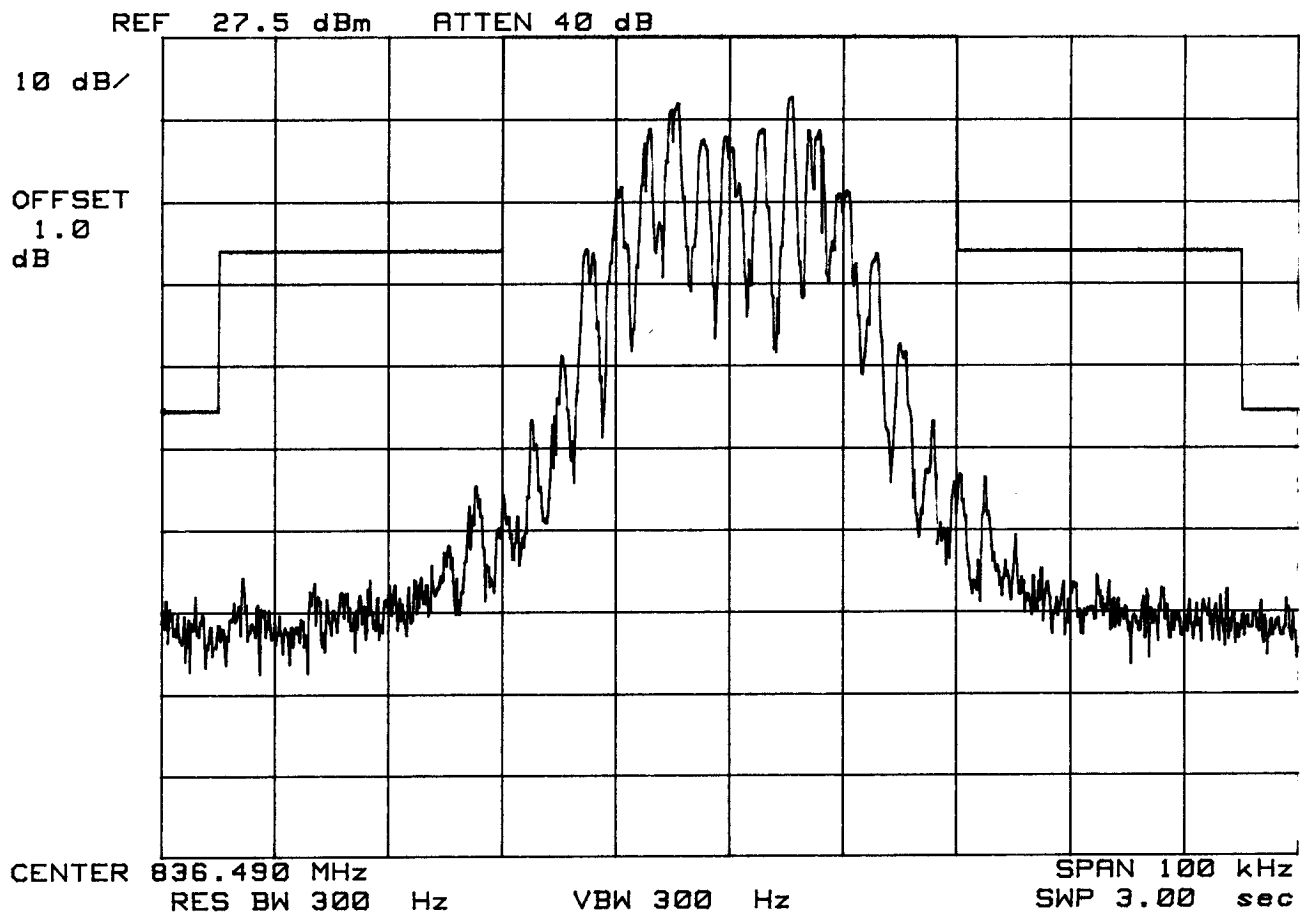


PCTEST Engineering Lab.

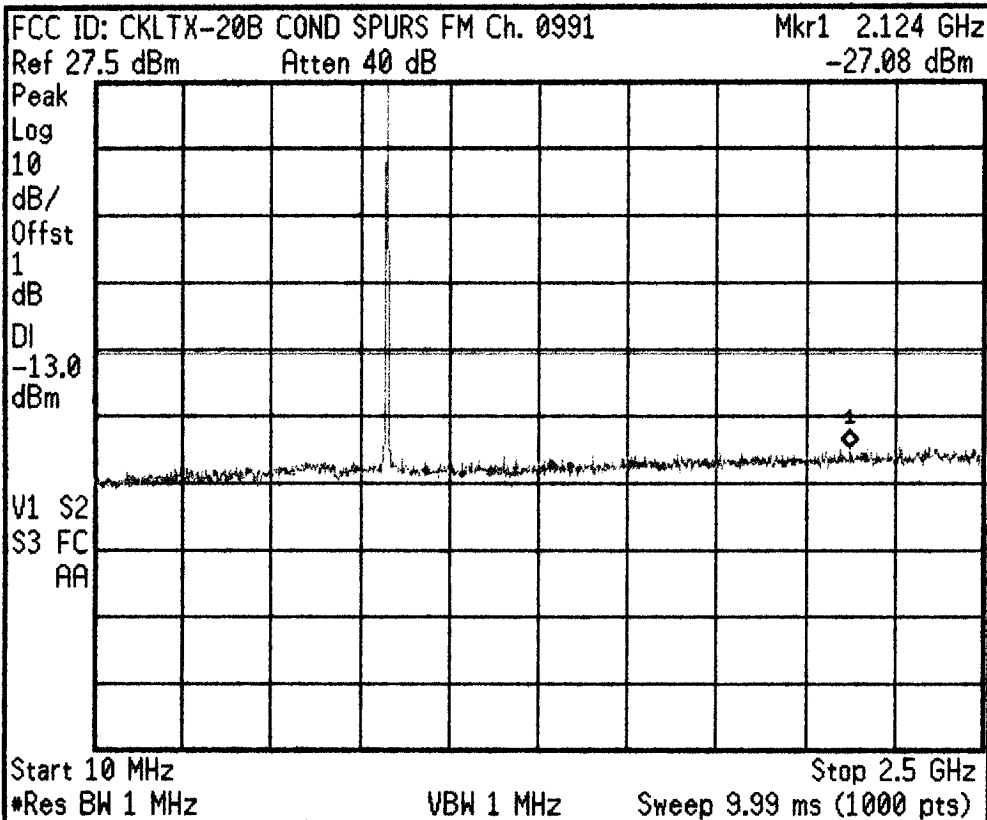
SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLTX-20B
HYUNDAI TRI-MODE PHONE
FM MODE
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 27.5 dBm

Test Mode:Voice



* Agilent 09:04:47 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

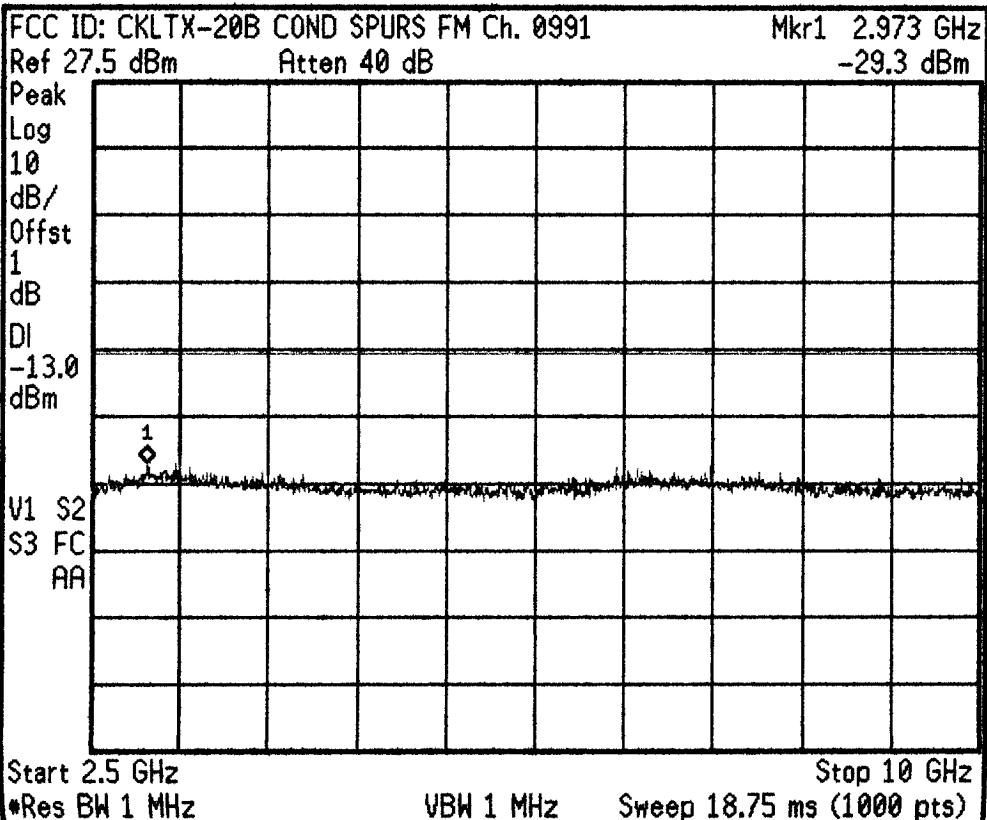
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 09:06:16 Nov 30, 2000



Freq/Channel

Center Freq
 6.25000000 GHz

Start Freq
 2.50000000 GHz

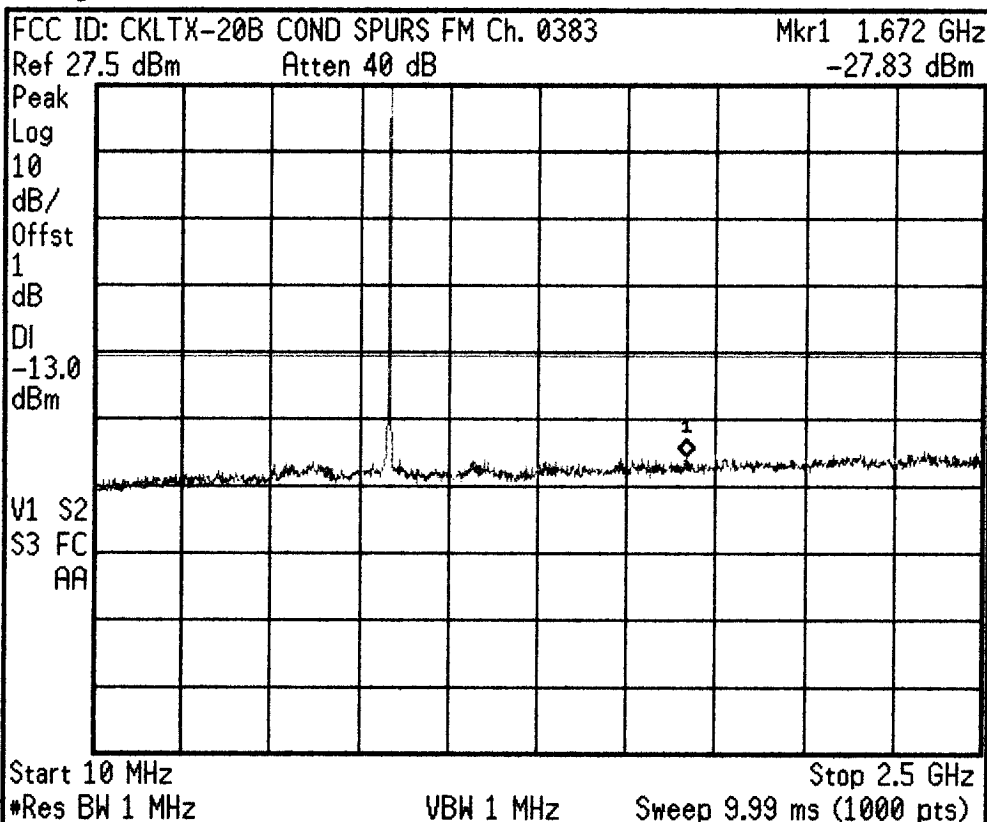
Stop Freq
 10.0000000 GHz

CF Step
 750.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 09:09:16 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

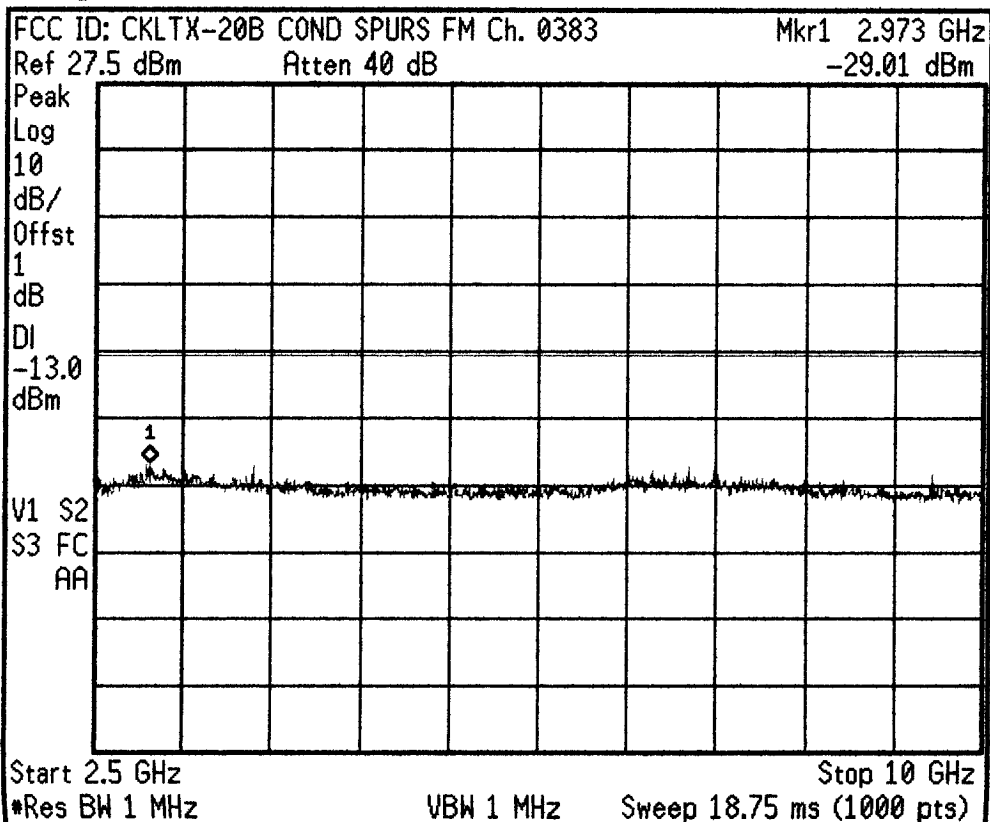
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 09:10:09 Nov 30, 2000



Freq/Channel

Center Freq
 6.25000000 GHz

Start Freq
 2.50000000 GHz

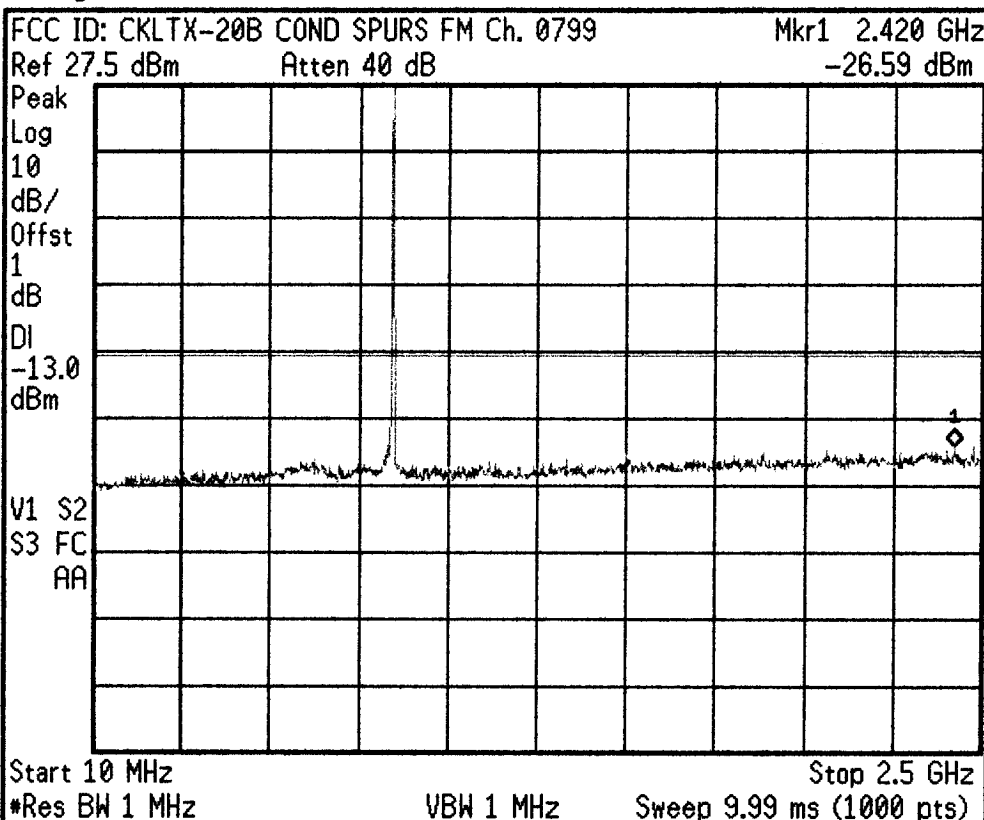
Stop Freq
 10.0000000 GHz

CF Step
 750.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 09:12:29 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

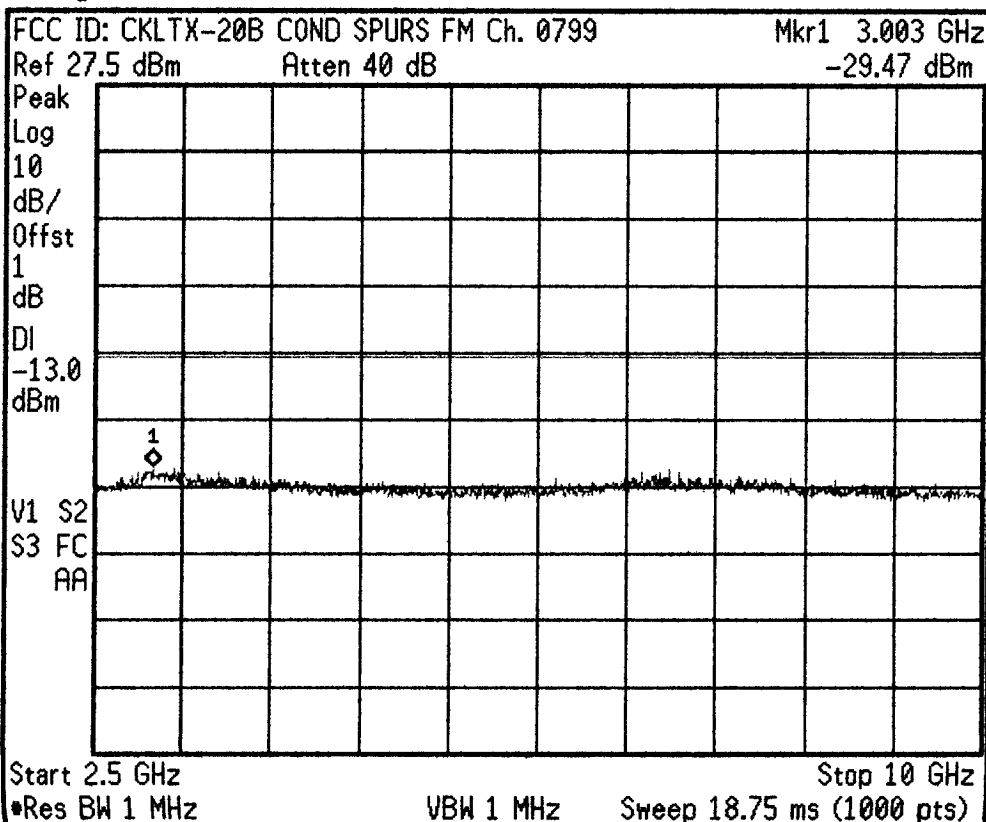
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 09:13:39 Nov 30, 2000



Freq/Channel

Center Freq
 6.25000000 GHz

Start Freq
 2.50000000 GHz

Stop Freq
 10.0000000 GHz

CF Step
 750.000000 MHz
 Auto Man

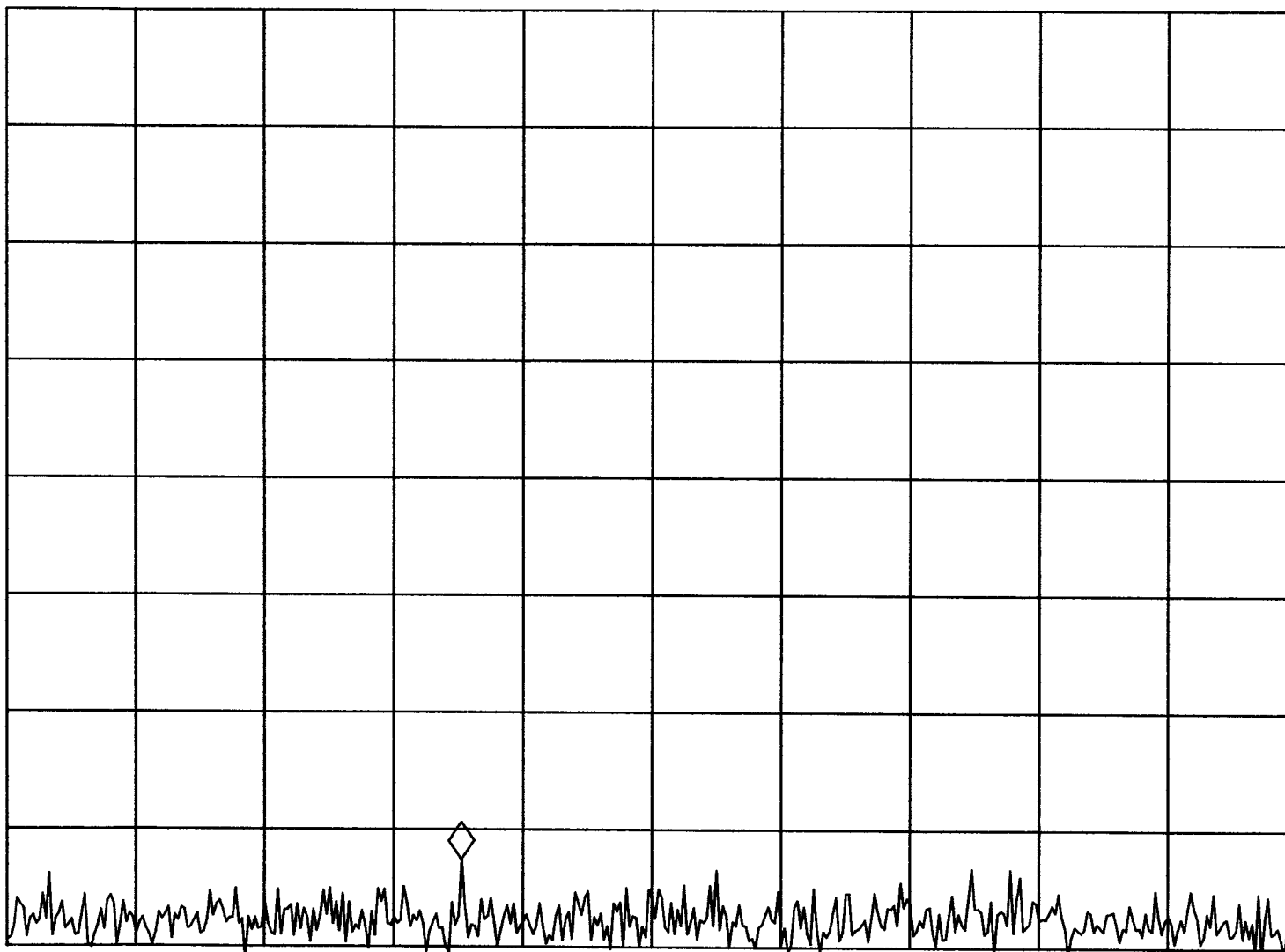
Freq Offset
 0.00000000 Hz

Signal Track
 On Off

hp HYUNDAI FCC ID: CKLTX-20B FM MODE MKR 877.81 MHz
REF -60.0 dBm ATTEN 10 dB PG 25.0 dB -96.27 dBm

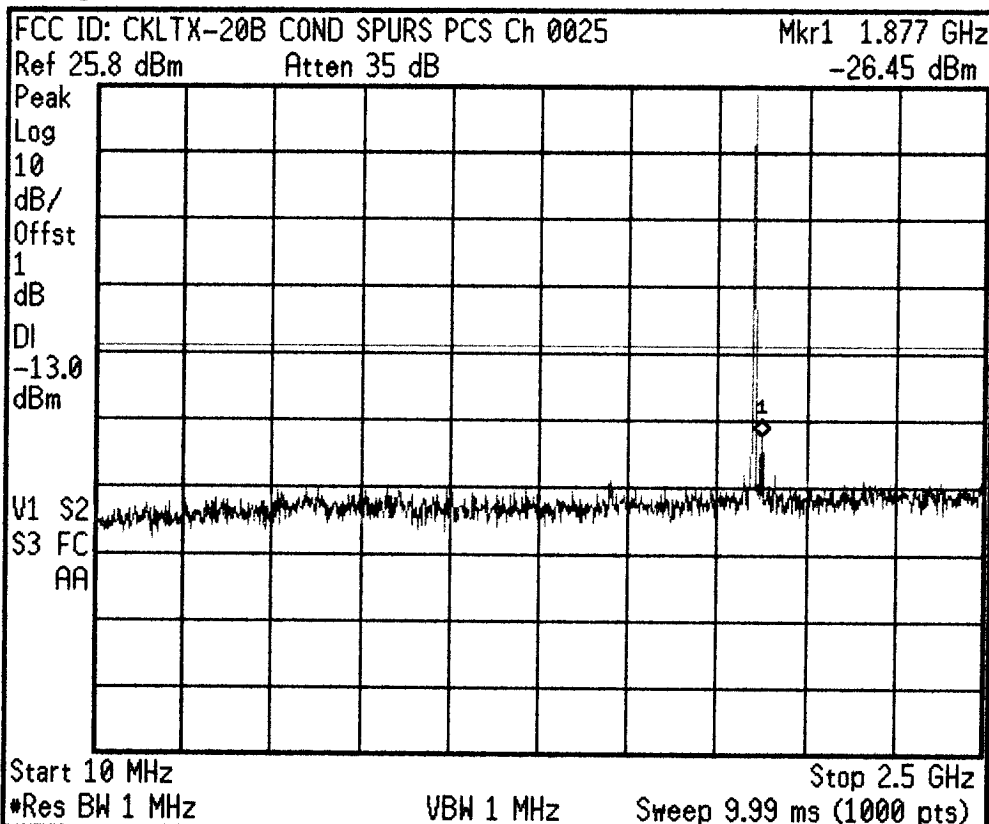
PEAK
LOG
5
dB/
OFFST
6.0
dB

VA SB
SC FC
CORR



START 869.00 MHz STOP 894.00 MHz
#RES BW 100 kHz #VBW 300 kHz SWP 20 msec

* Agilent 14:25:22 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

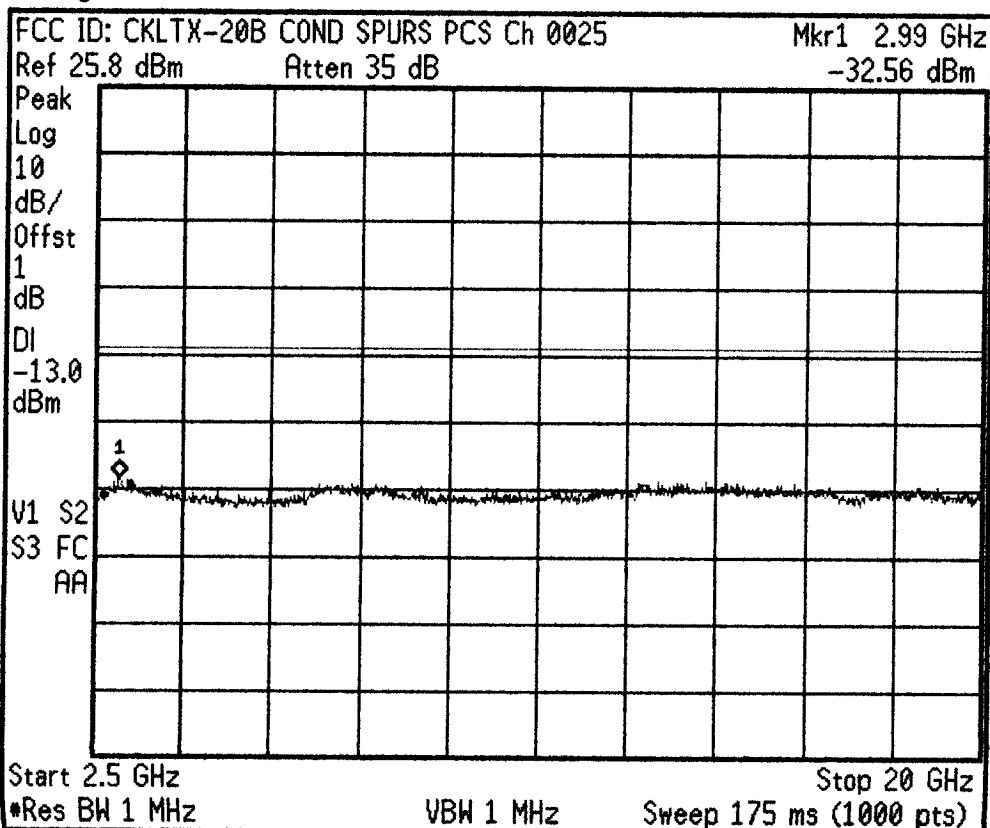
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 14:26:40 Nov 30, 2000



Freq/Channel

Center Freq
 11.2500000 GHz

Start Freq
 2.50000000 GHz

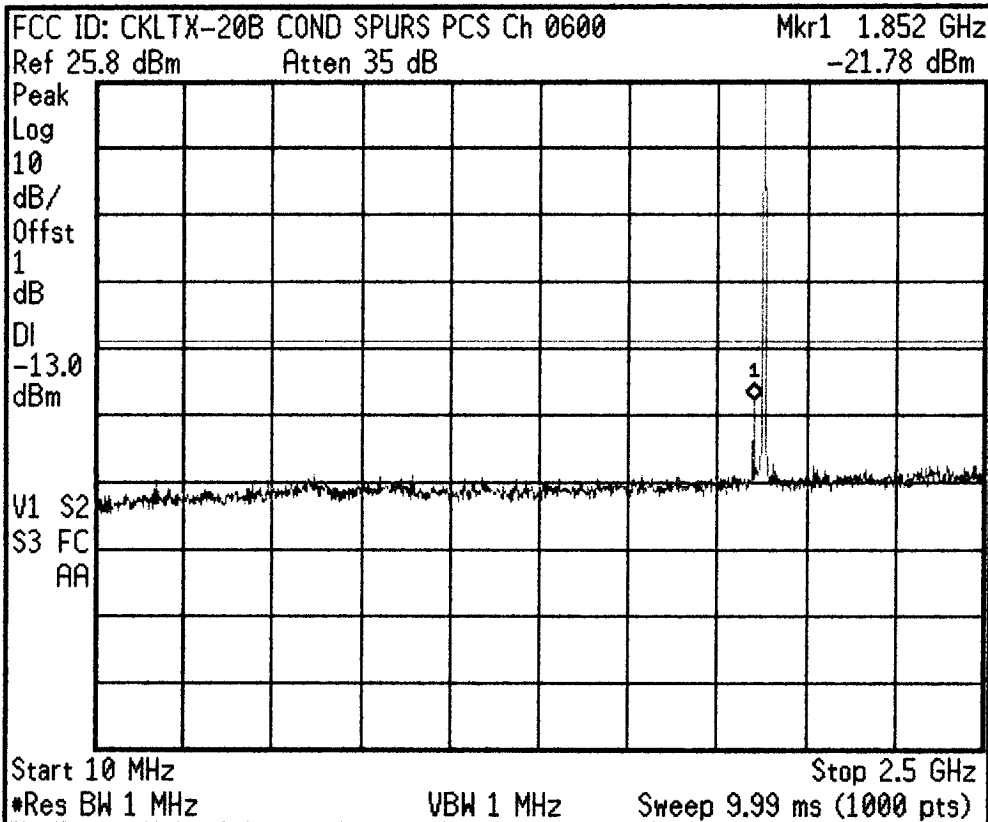
Stop Freq
 20.0000000 GHz

CF Step
 1.75000000 GHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 14:31:58 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

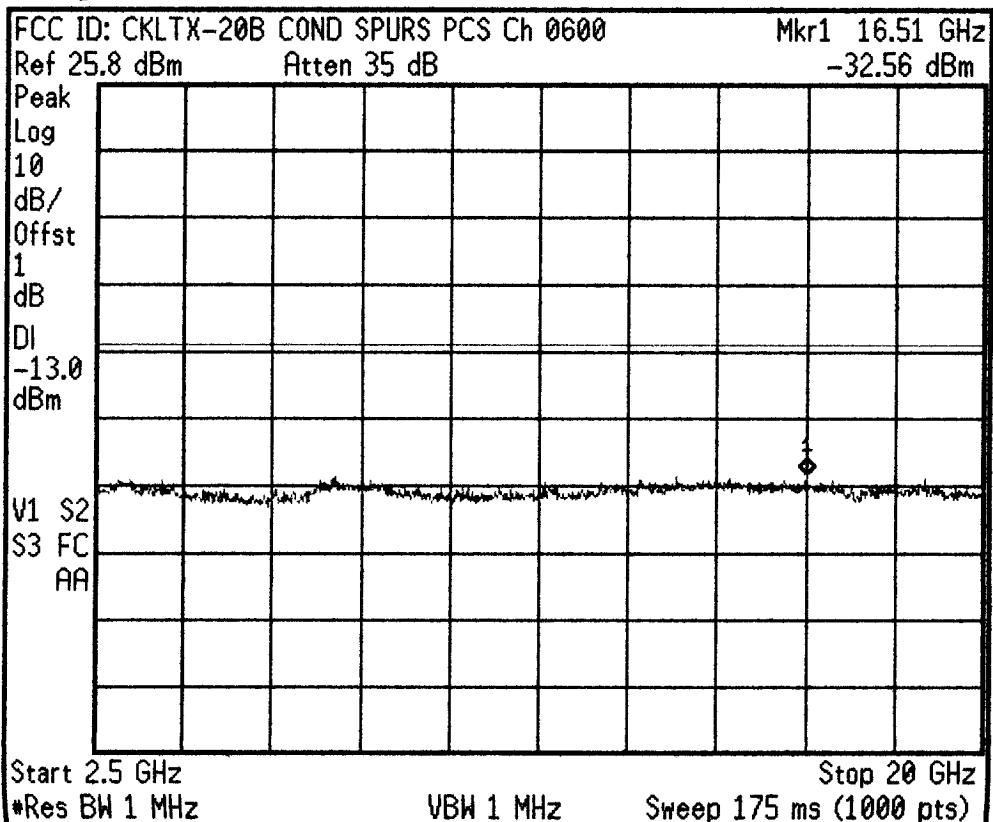
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 14:32:51 Nov 30, 2000



Freq/Channel

Center Freq
 11.2500000 GHz

Start Freq
 2.50000000 GHz

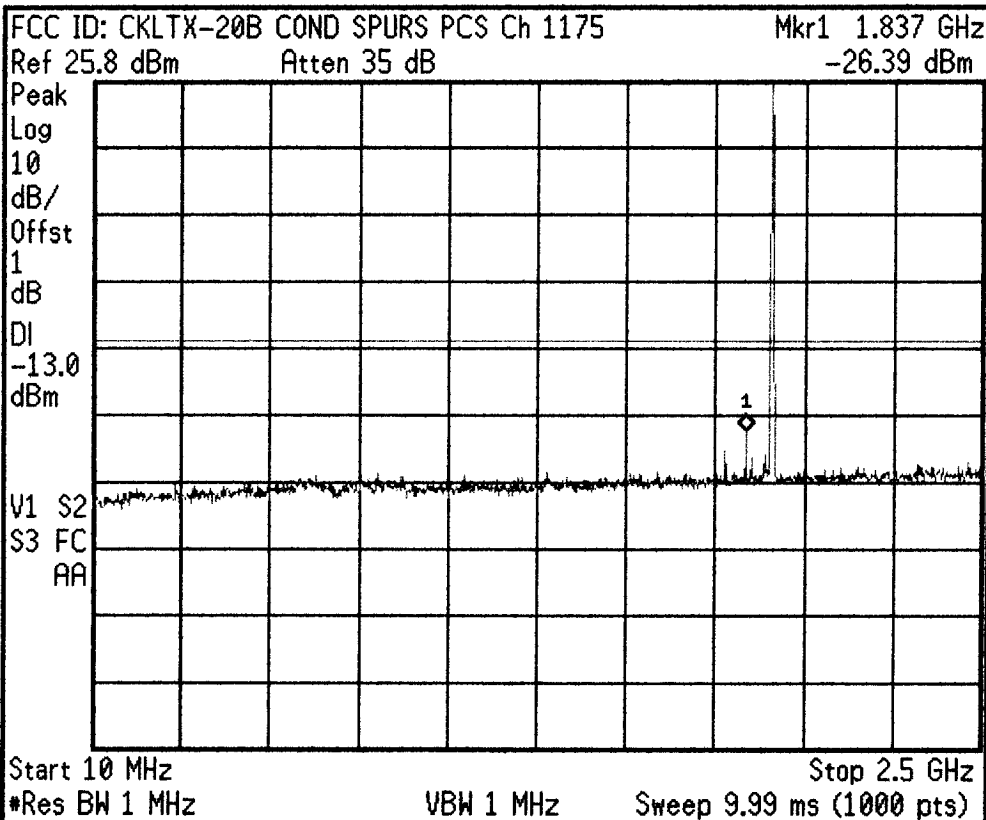
Stop Freq
 20.0000000 GHz

CF Step
 1.75000000 GHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 14:38:09 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

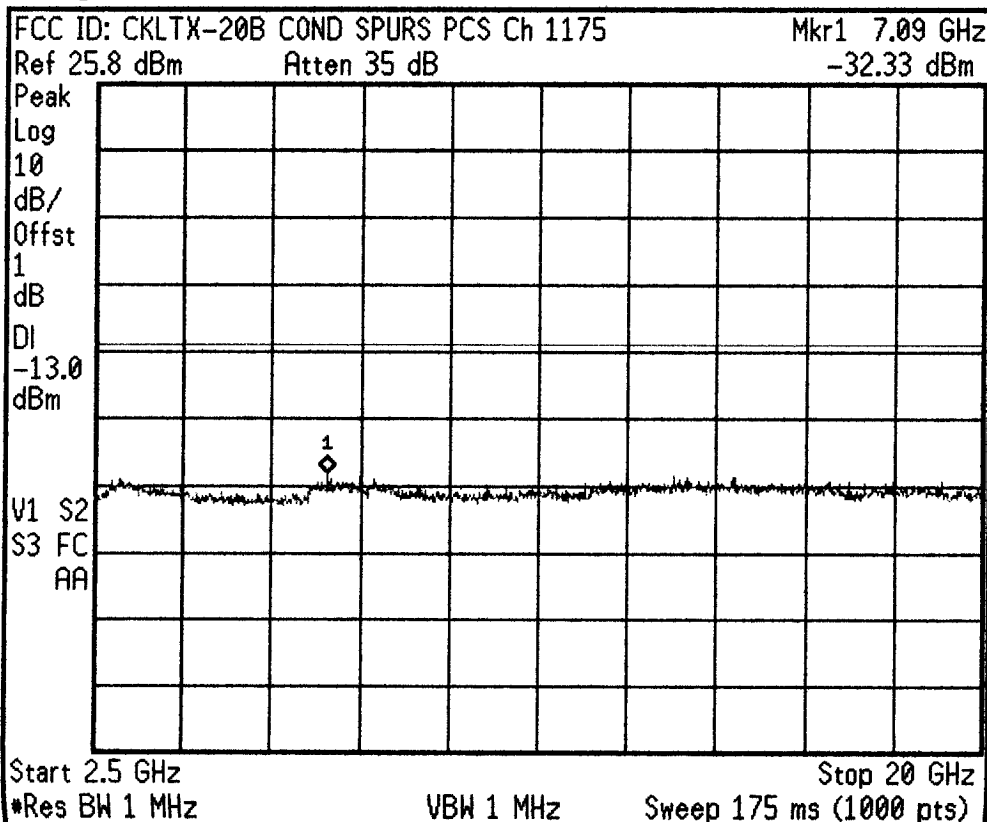
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 14:39:03 Nov 30, 2000



Freq/Channel

Center Freq
 11.2500000 GHz

Start Freq
 2.50000000 GHz

Stop Freq
 20.0000000 GHz

CF Step
 1.75000000 GHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

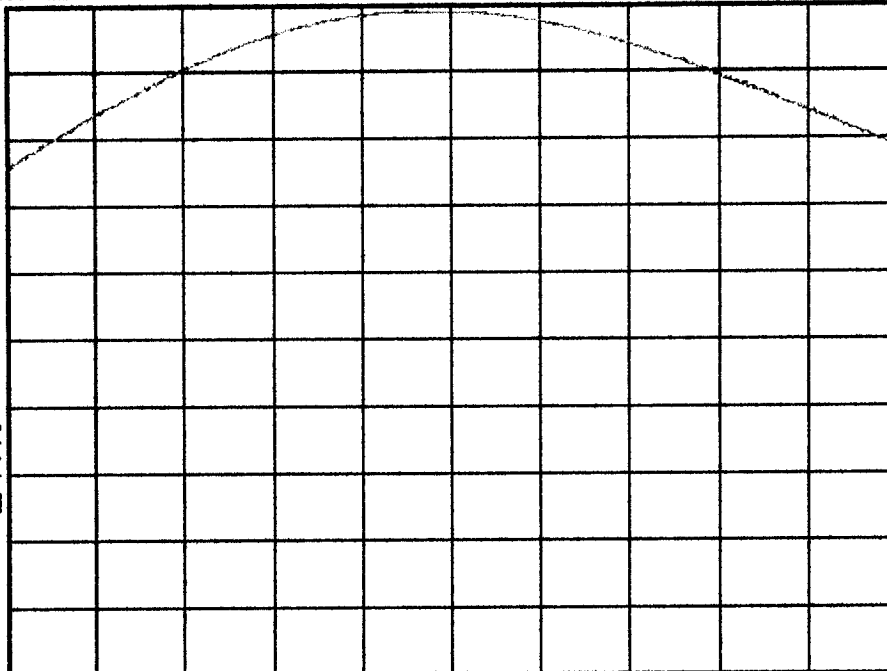
* Agilent 14:41:43 Nov 30, 2000

FCC ID: CKLTX-20B POWER OUT PCS Ch 1175

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 1.909 GHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Span 10 MHz

Freq/Channel

Center Freq

1.90900000 GHz

Start Freq

1.90400000 GHz

Stop Freq

1.91400000 GHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

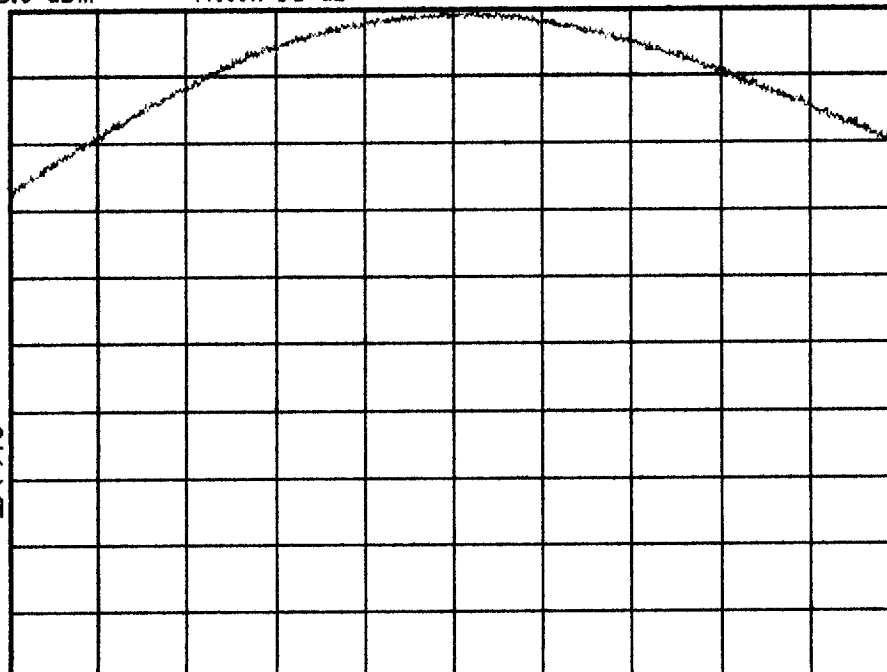
* Agilent 14:43:30 Nov 30, 2000

FCC ID: CKLTX-20B POWER OUT PCS Ch 0600

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 1.88 GHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Span 10 MHz

Freq/Channel

Center Freq

1.88000000 GHz

Start Freq

1.87500000 GHz

Stop Freq

1.88500000 GHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

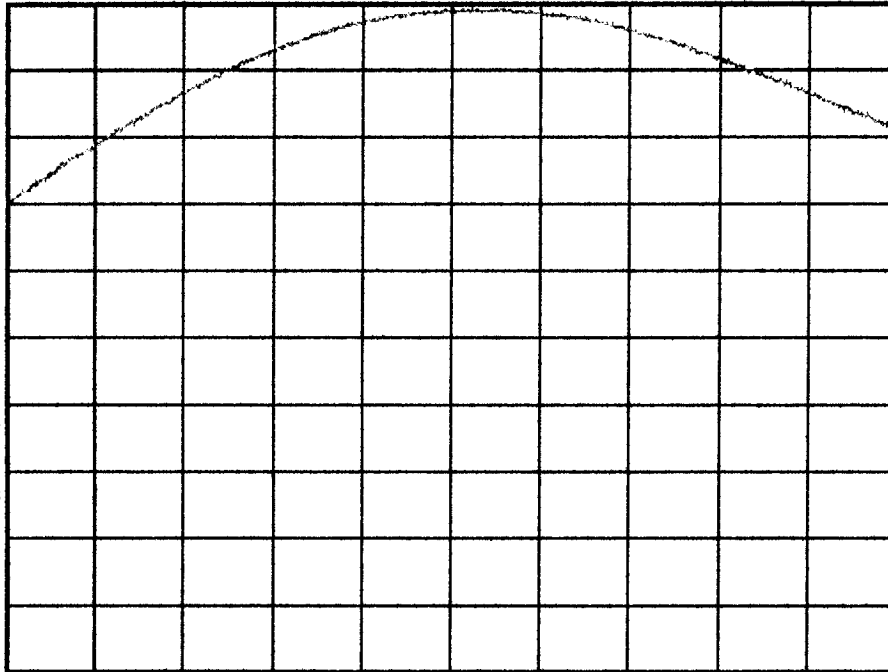
* Agilent 14:58:47 Nov 30, 2000

FCC ID: CKLTX-20B POWER OUT PCS Ch 0025

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 1.851 GHz

Span 10 MHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Freq/Channel

Center Freq
1.85100000 GHz

Start Freq
1.84600000 GHz

Stop Freq
1.85600000 GHz

CF Step
1.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

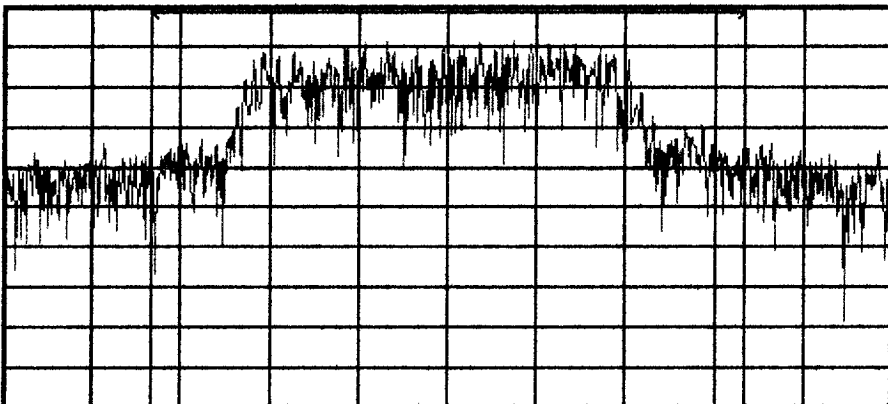
Signal Track
On Off

* Agilent 15:03:34 Nov 30, 2000

FCC ID: CKLTX-20B POWER OUT PCS Ch 0025

Ref 25.8 dBm Atten 35 dB

Samp
Log
10
dB/
Offst
1
dB



Center 1.851 GHz

Span 3 MHz

*Res BW 30 kHz

*VBW 300 kHz

Sweep 9.99 ms (1000 pts)

Span

Span
3.00000000 MHz

Span Zoom

Full Span

Zero Span

Last Span

Channel Power Results (idle)

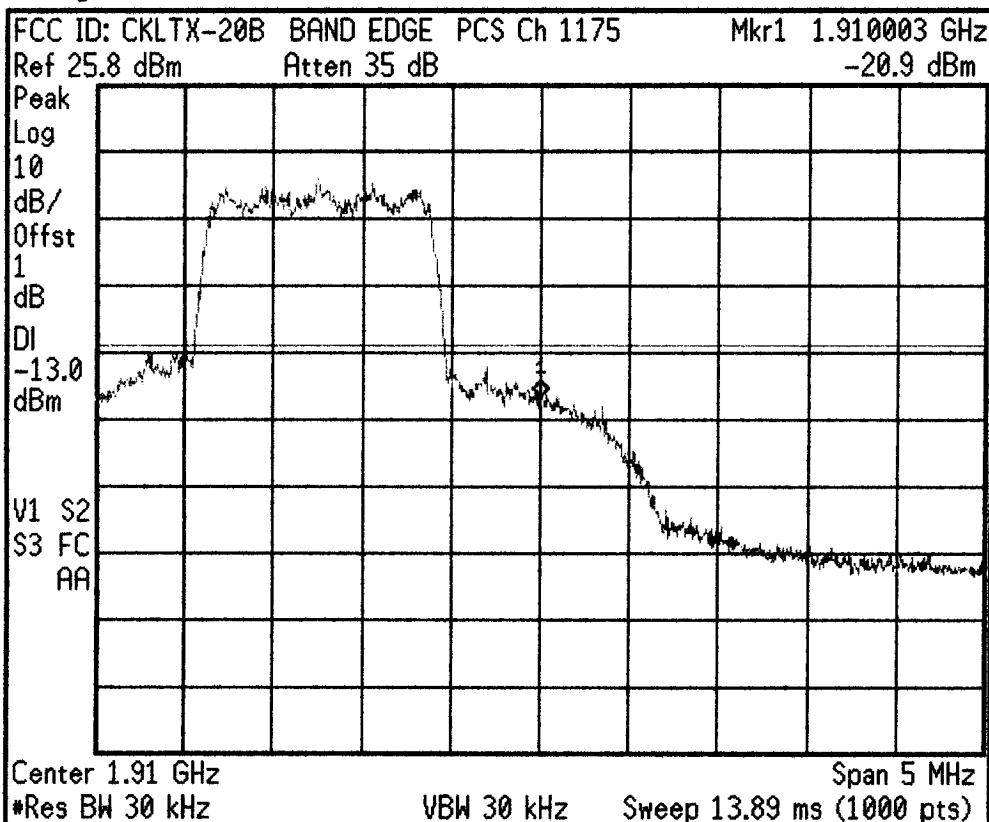
Channel Power
25.80 dBm

Integration BW 2.000 MHz

Density -37.21 dBm/Hz

Zone

* Agilent 15:14:45 Nov 30, 2000



Freq/Channel

Center Freq
 1.91000000 GHz

Start Freq
 1.90750000 GHz

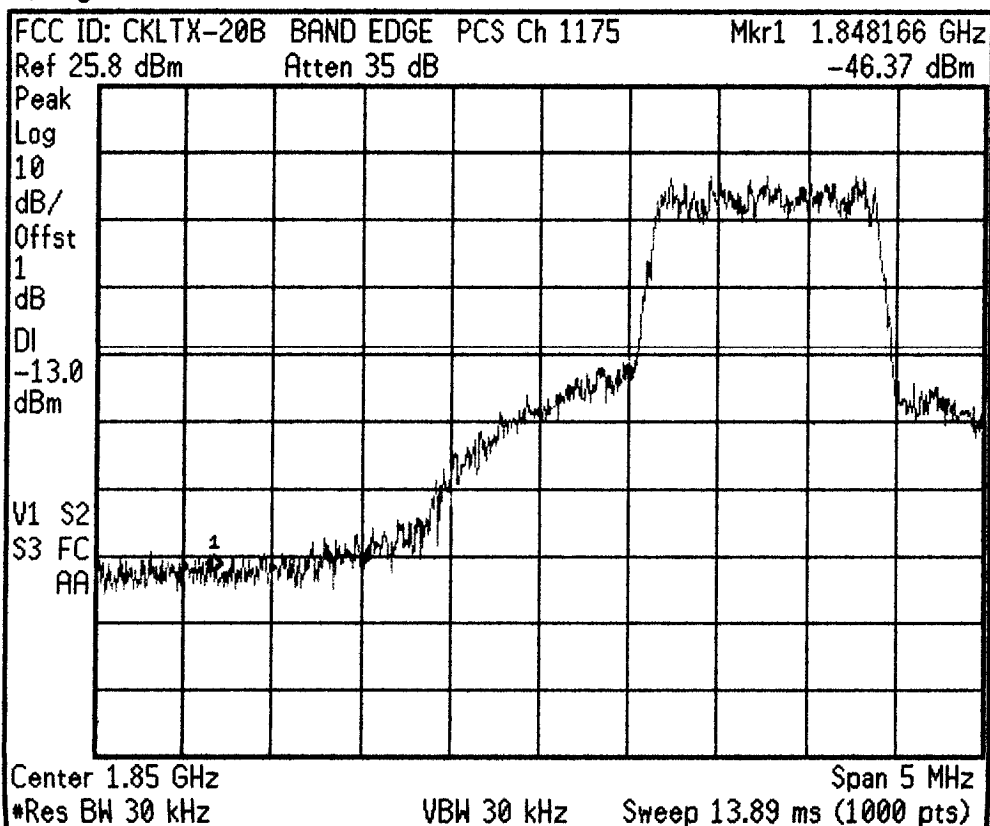
Stop Freq
 1.91250000 GHz

CF Step
 500.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:22:03 Nov 30, 2000



Freq/Channel

Center Freq
 1.85000000 GHz

Start Freq
 1.84750000 GHz

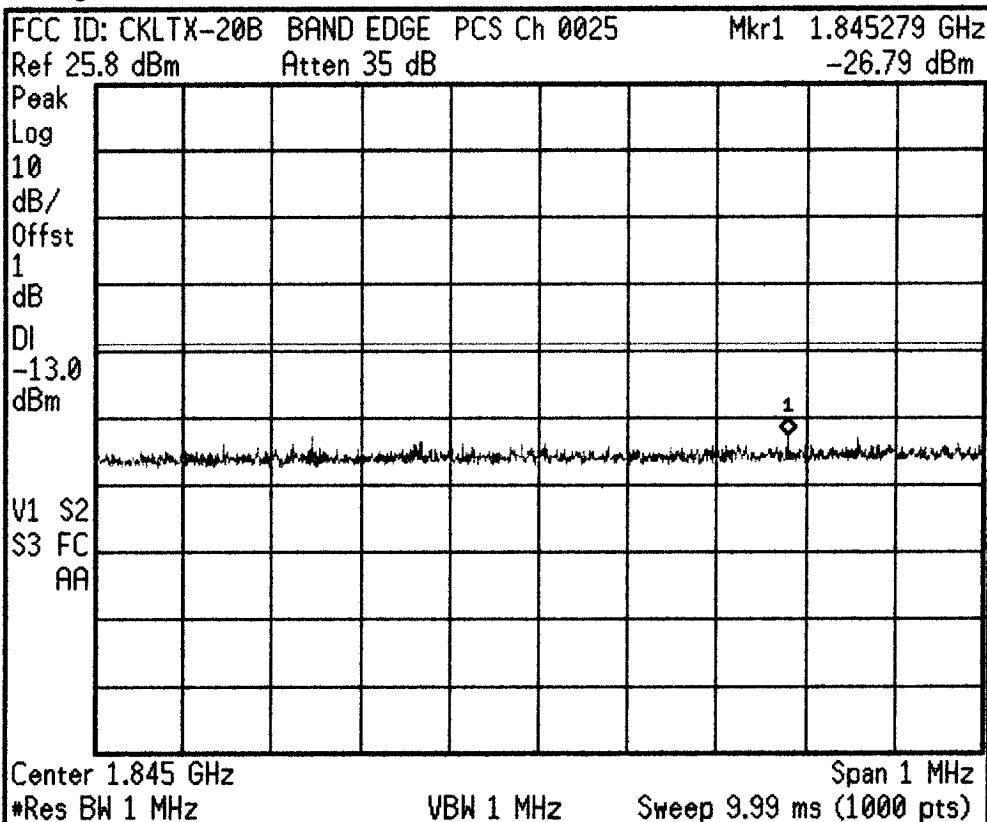
Stop Freq
 1.85250000 GHz

CF Step
 500.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:28:52 Nov 30, 2000



Freq/Channel

Center Freq
 1.84500000 GHz

Start Freq
 1.84450000 GHz

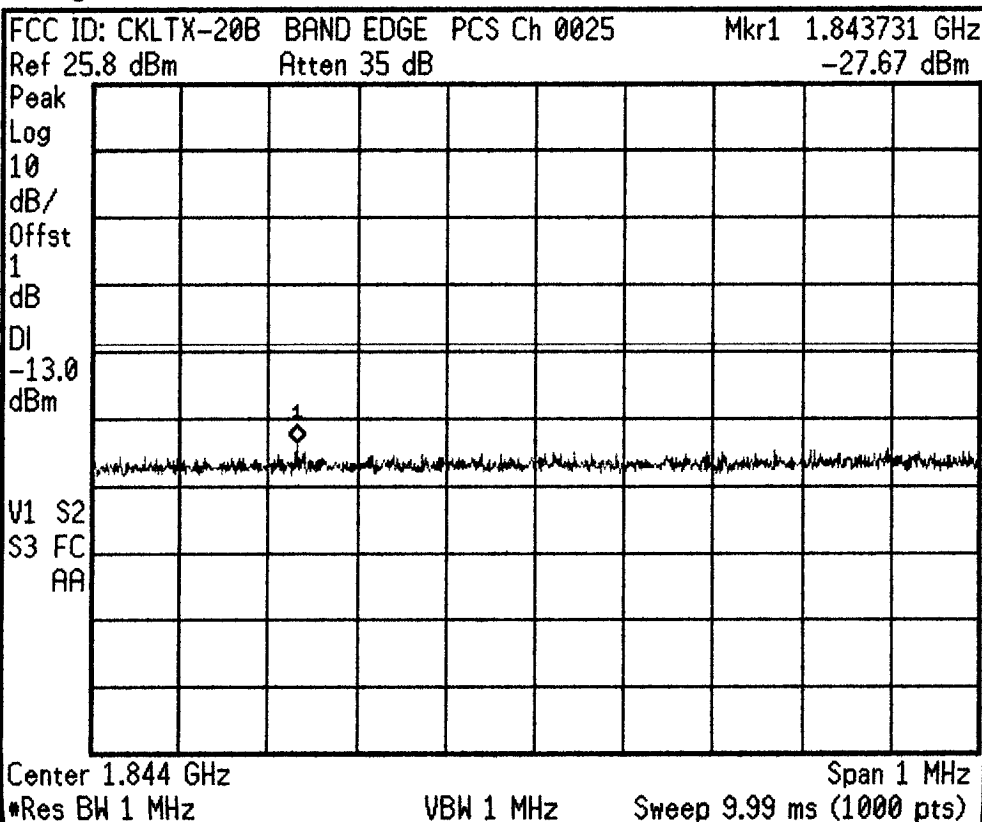
Stop Freq
 1.84550000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:29:42 Nov 30, 2000



Freq/Channel

Center Freq
 1.84400000 GHz

Start Freq
 1.84350000 GHz

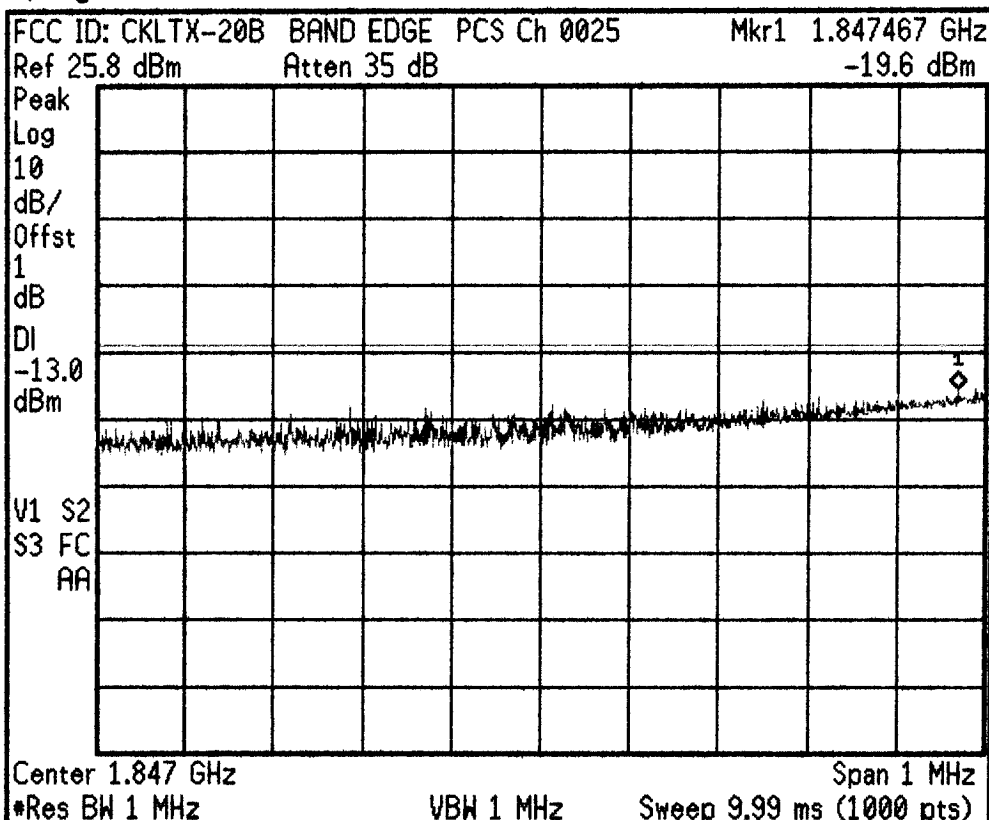
Stop Freq
 1.84450000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:27:15 Nov 30, 2000



Freq/Channel

Center Freq
 1.84700000 GHz

Start Freq
 1.84650000 GHz

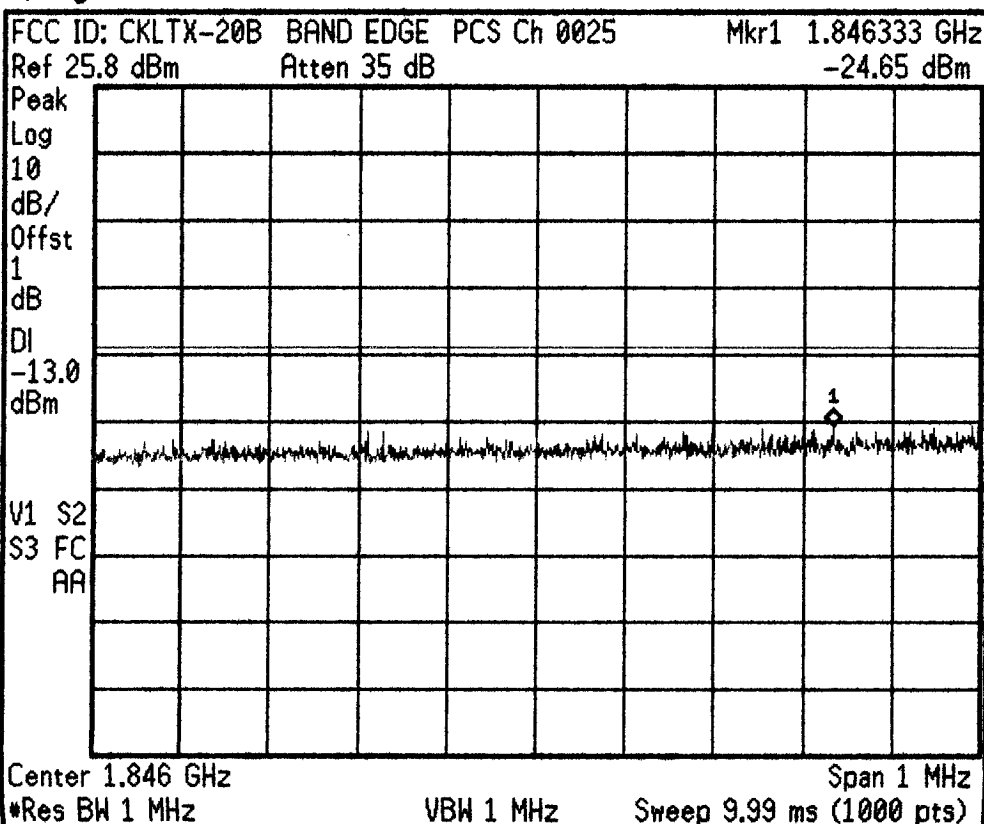
Stop Freq
 1.84750000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:28:00 Nov 30, 2000



Freq/Channel

Center Freq
 1.84600000 GHz

Start Freq
 1.84550000 GHz

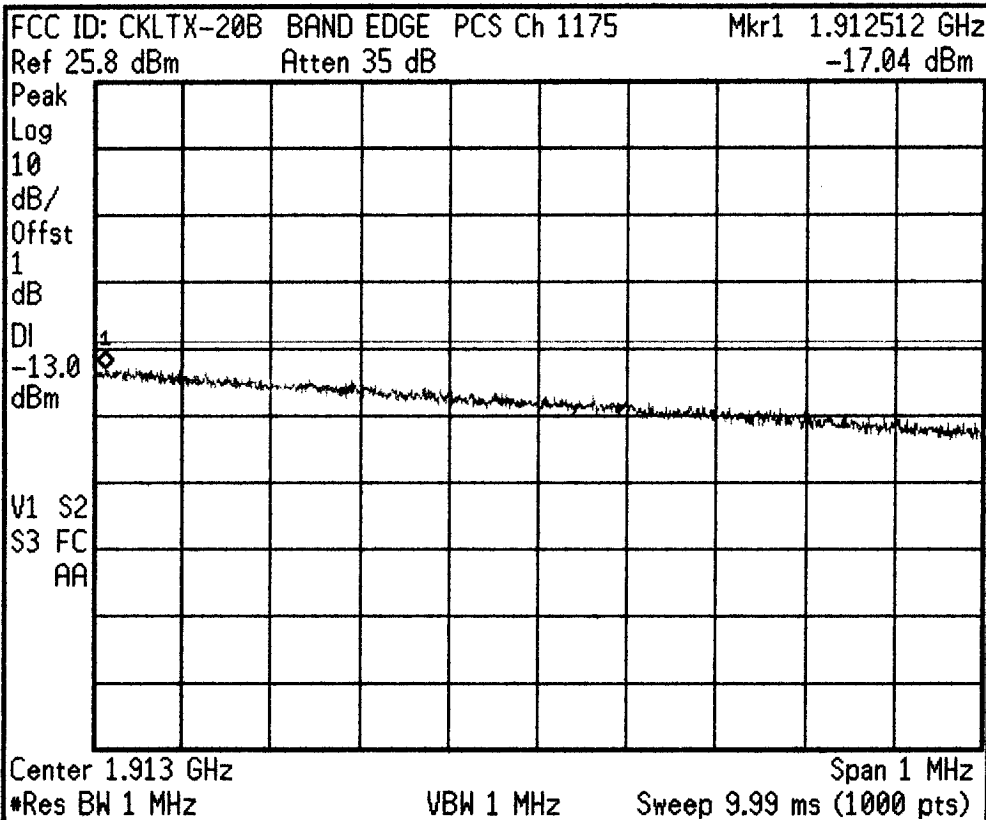
Stop Freq
 1.84650000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:35:07 Nov 30, 2000



Freq/Channel

Center Freq
 1.91300000 GHz

Start Freq
 1.91250000 GHz

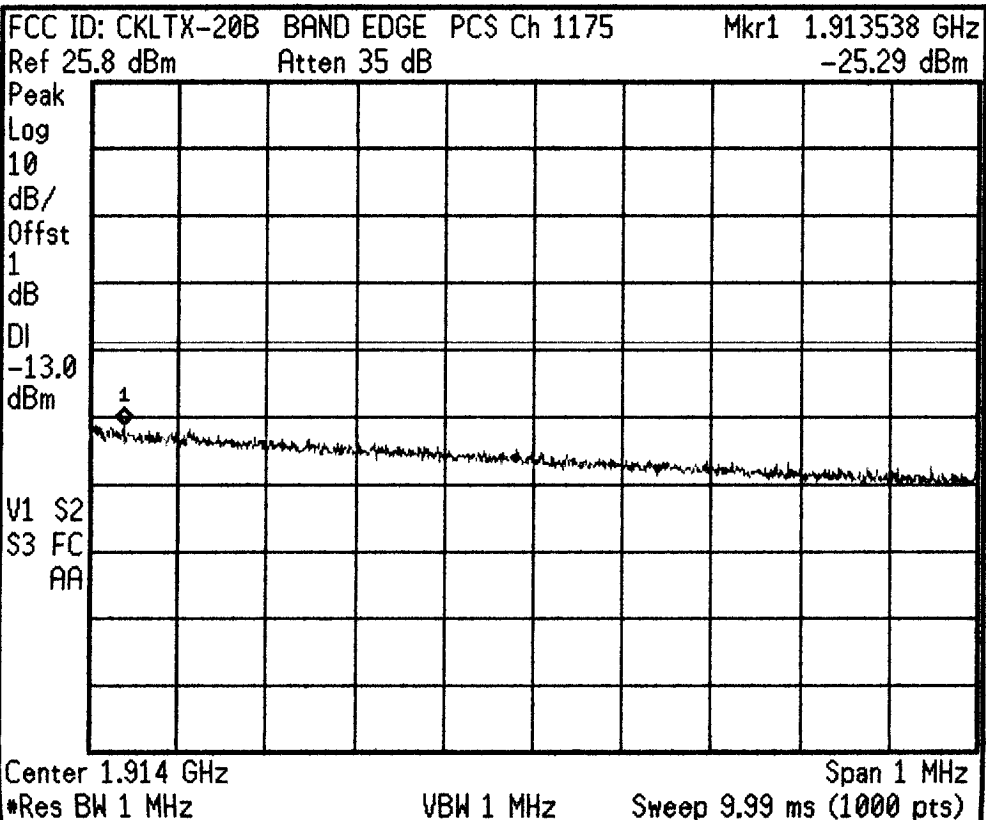
Stop Freq
 1.91350000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:35:40 Nov 30, 2000



Freq/Channel

Center Freq
 1.91400000 GHz

Start Freq
 1.91350000 GHz

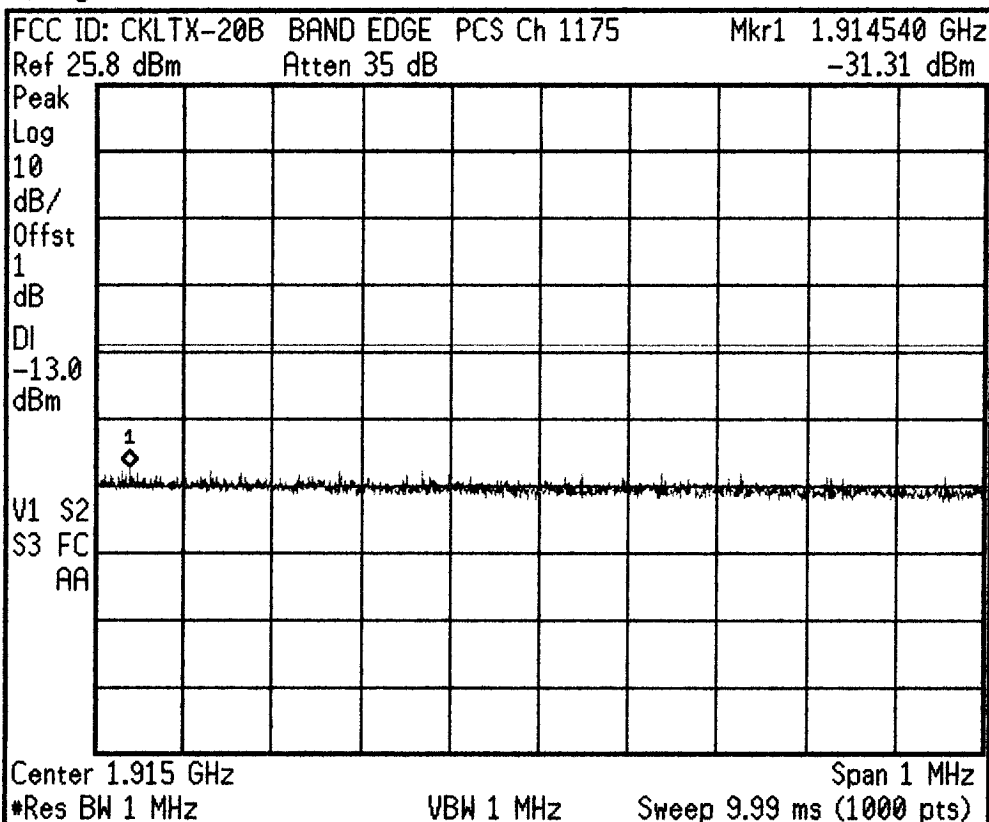
Stop Freq
 1.91450000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:36:27 Nov 30, 2000



Freq/Channel

Center Freq
 1.91500000 GHz

Start Freq
 1.91450000 GHz

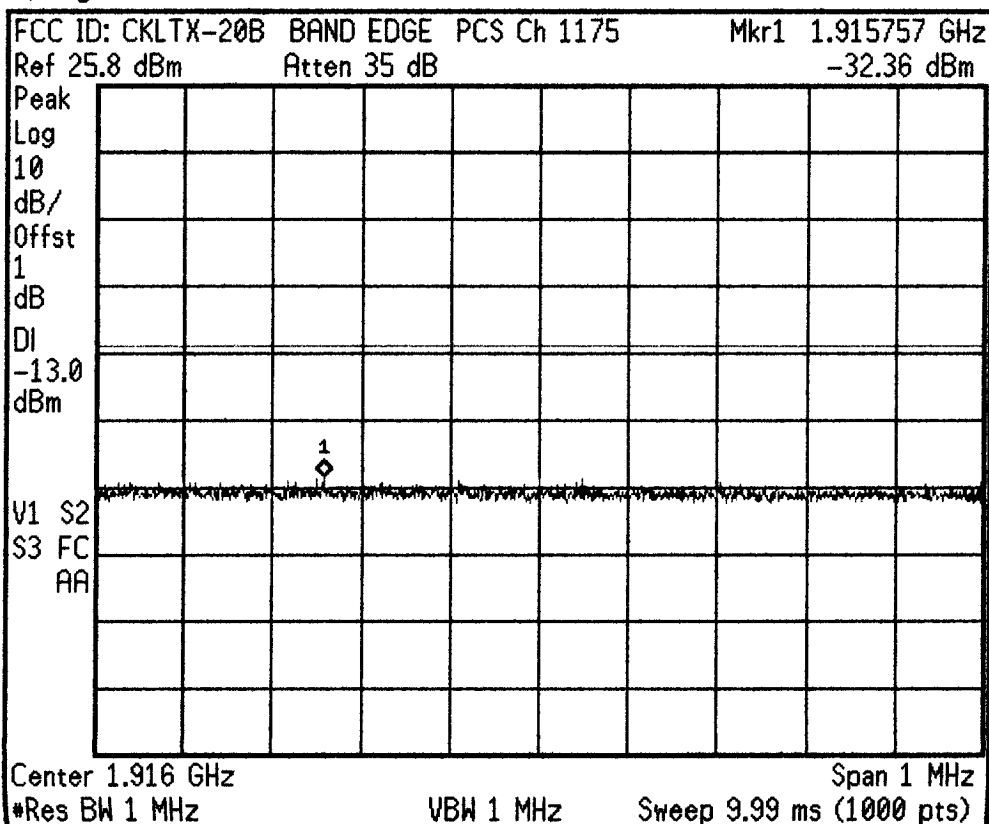
Stop Freq
 1.91550000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 15:37:04 Nov 30, 2000



Freq/Channel

Center Freq
 1.91600000 GHz

Start Freq
 1.91550000 GHz

Stop Freq
 1.91650000 GHz

CF Step
 100.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

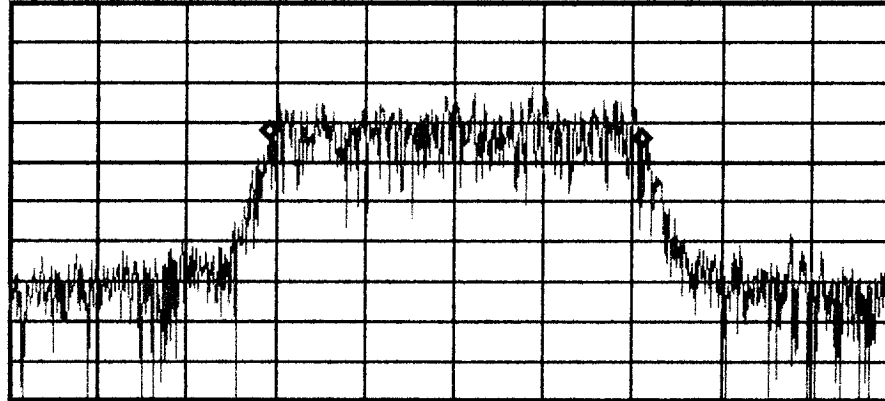
Signal Track
 On Off

* Agilent 15:42:40 Nov 30, 2000

FCC ID: CKLTX-20B BAND EDGE PCS Ch 0600

Ref 25.8 dBm Atten 35 dB

Samp
Log
10
dB/
Offst
1
dB



Center 1.88 GHz

Span 3 MHz

*Res BW 30 kHz

*VBW 300 kHz

Sweep 9.99 ms (1000 pts)

Occupied Bandwidth Results (idle)

Occupied Bandwidth

Occ BW % Pwr 99.00 %

1.251 MHz

Transmit Freq Error 3.432 kHz

Freq/Channel

Center Freq
1.88000000 GHz

Start Freq
1.87850000 GHz

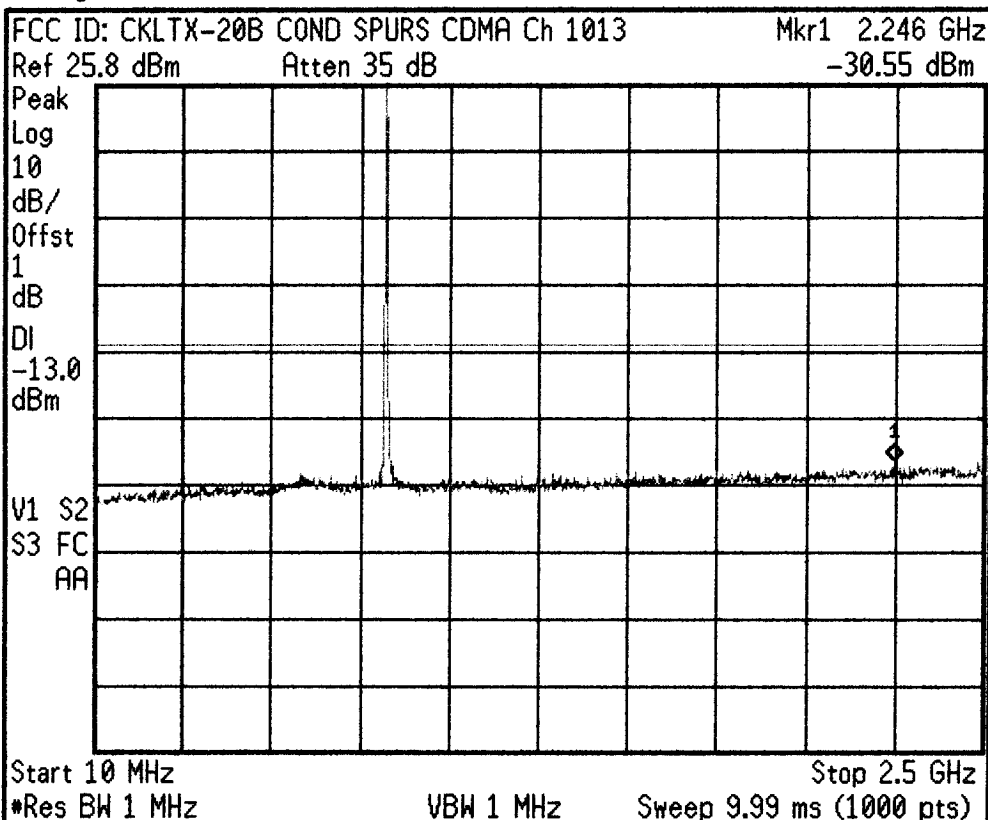
Stop Freq
1.88150000 GHz

CF Step
300.000000 kHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

* Agilent 12:59:56 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

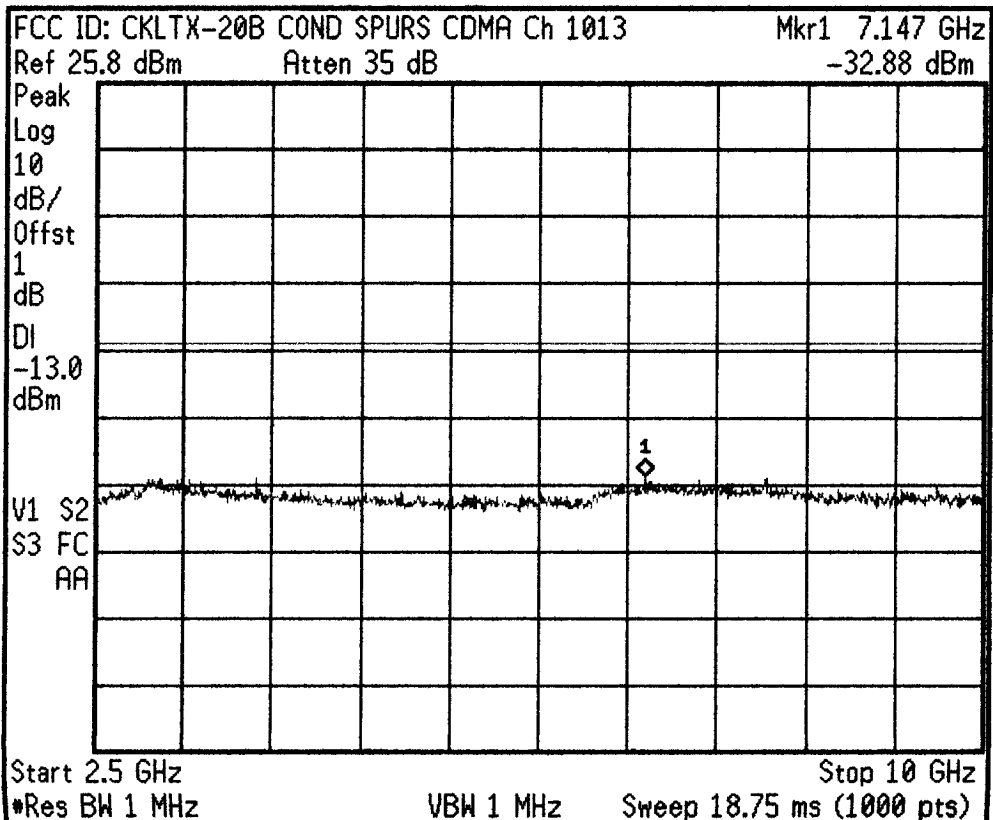
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 13:01:15 Nov 30, 2000



Freq/Channel

Center Freq
 6.25000000 GHz

Start Freq
 2.50000000 GHz

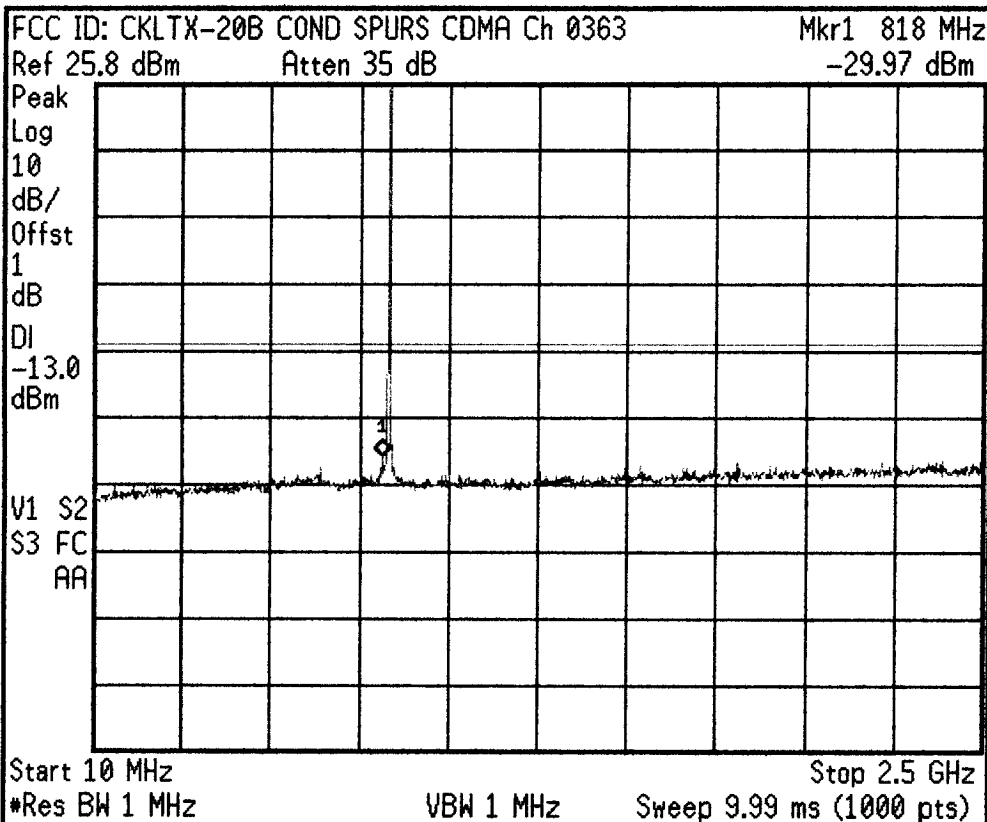
Stop Freq
 10.0000000 GHz

CF Step
 750.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 13:13:19 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

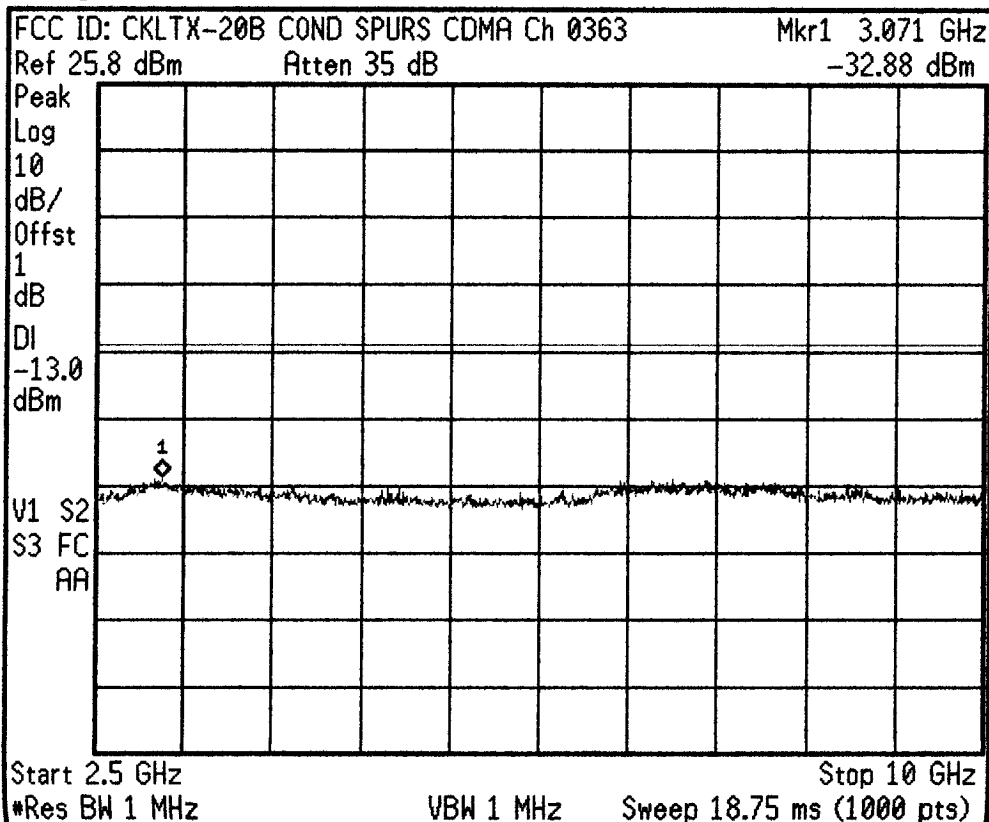
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 13:14:30 Nov 30, 2000



Freq/Channel

Center Freq
 6.25000000 GHz

Start Freq
 2.50000000 GHz

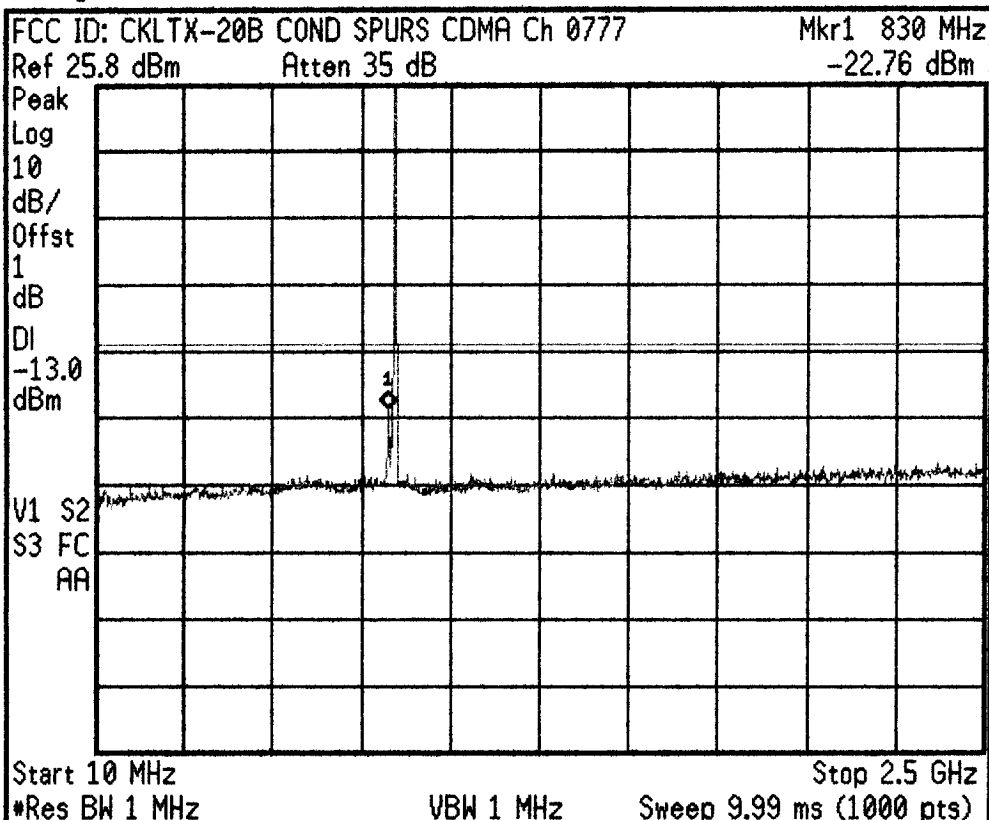
Stop Freq
 10.0000000 GHz

CF Step
 750.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 13:26:46 Nov 30, 2000



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

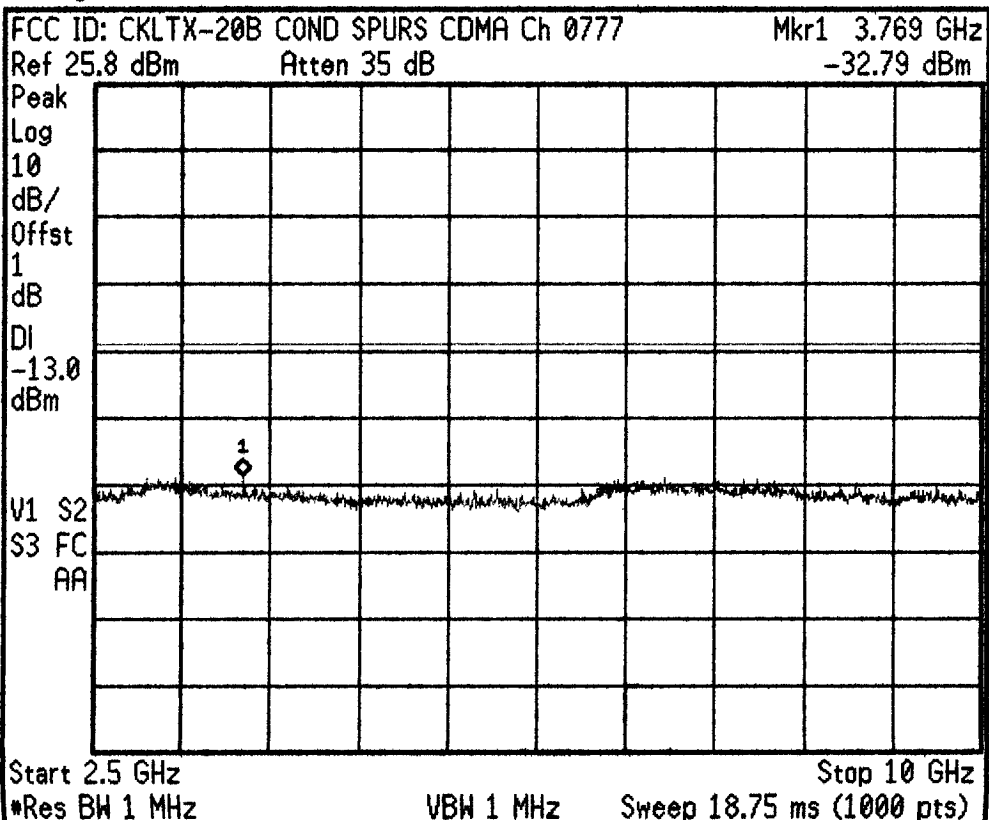
Stop Freq
 2.50000000 GHz

CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

* Agilent 13:28:01 Nov 30, 2000



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

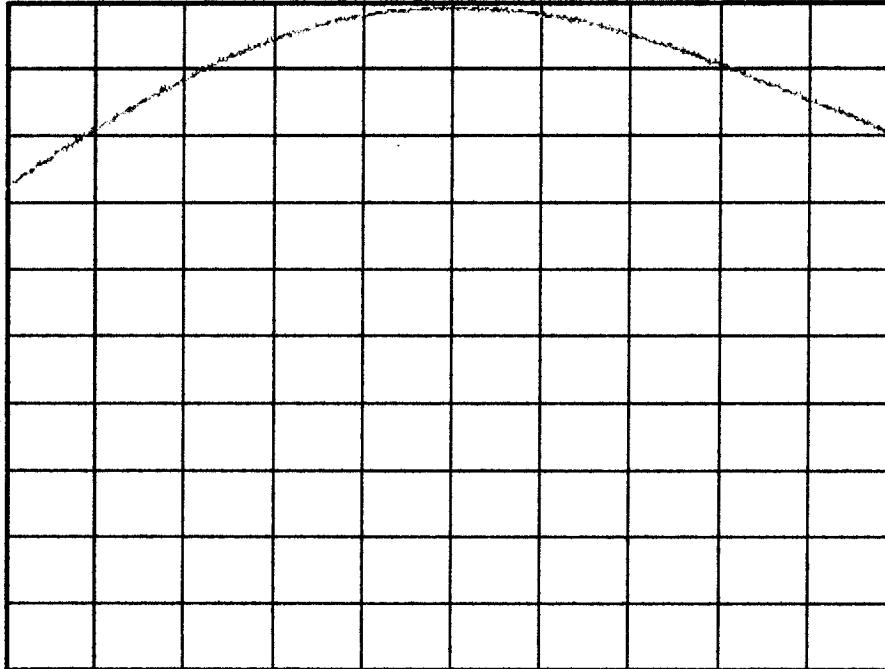
* Agilent 13:32:16 Nov 30, 2000

FCC ID: CKLTX-20B CDMA POWER OUT Ch 0777

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 848.3 MHz

Span 10 MHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Freq/Channel

Center Freq
848.300000 MHz

Start Freq
843.300000 MHz

Stop Freq
853.300000 MHz

CF Step
1.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

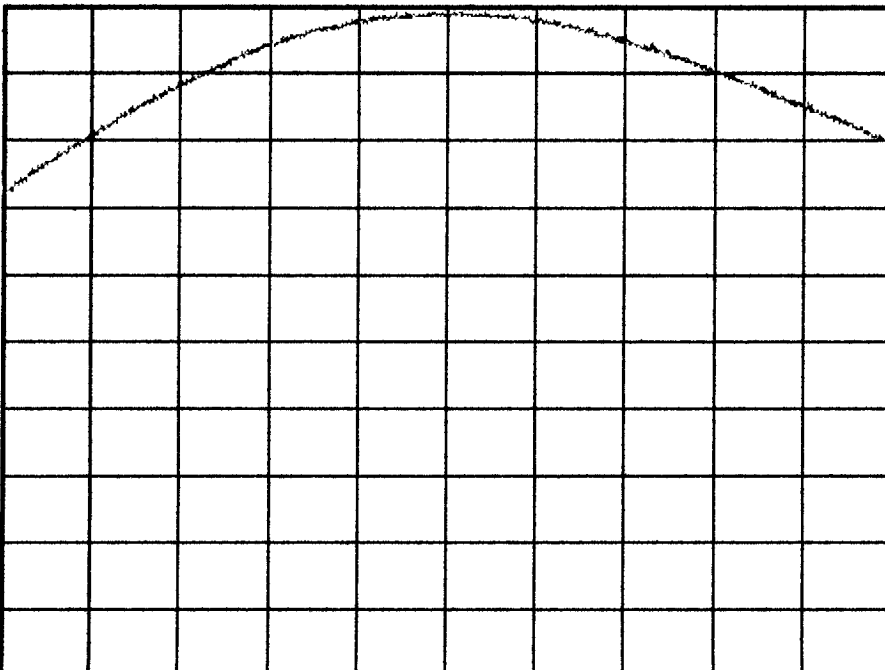
* Agilent 13:34:42 Nov 30, 2000

FCC ID: CKLTX-20B CDMA POWER OUT Ch 1013

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 824.7 MHz

Span 10 MHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Freq/Channel

Center Freq
824.700000 MHz

Start Freq
819.700000 MHz

Stop Freq
829.700000 MHz

CF Step
1.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

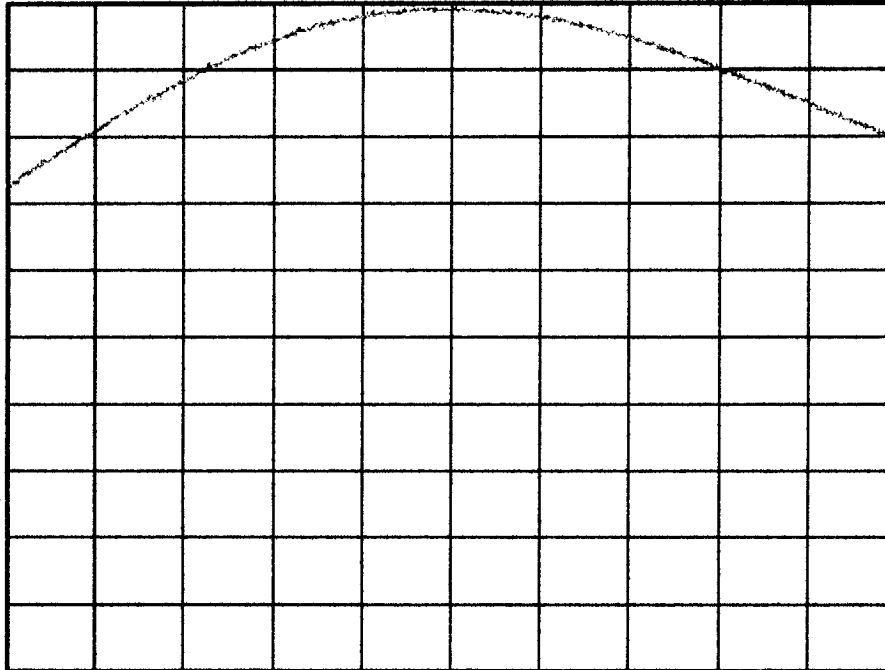
* Agilent 13:44:25 Nov 30, 2000

FCC ID: CKLTX-20B CDMA POWER OUT Ch 0363

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1
dB

V1 S2
S3 FC
AA



Center 835.9 MHz

Span 10 MHz

*Res BW 3 MHz

VBW 3 MHz

Sweep 9.99 ms (1000 pts)

Freq/Channel

Center Freq

835.900000 MHz

Start Freq

830.900000 MHz

Stop Freq

840.900000 MHz

CF Step

1.00000000 MHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

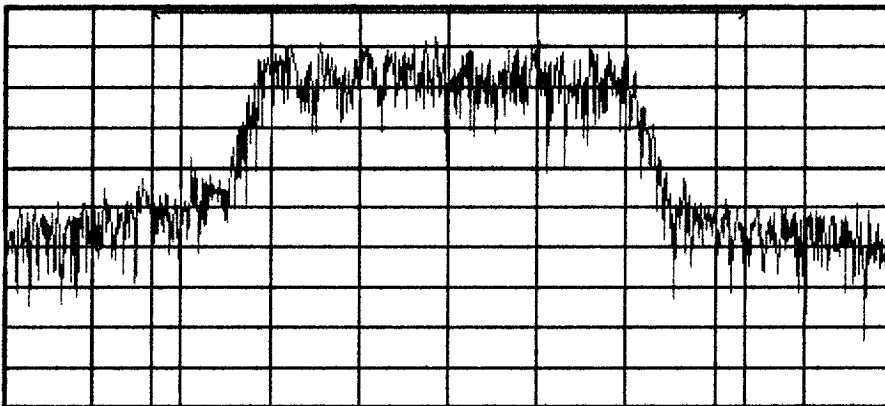
On Off

* Agilent 13:49:07 Nov 30, 2000

FCC ID: CKLTX-20B CDMA POWER OUT Ch 0363

Ref 25.8 dBm Atten 35 dB

Samp
Log
10
dB/
Offst
1
dB



Center 835.9 MHz

Span 3 MHz

*Res BW 30 kHz

*VBW 300 kHz

Sweep 9.99 ms (1000 pts)

Freq/Channel

Center Freq

835.900000 MHz

Start Freq

834.400000 MHz

Stop Freq

837.400000 MHz

CF Step

300.000000 kHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

On Off

Channel Power Results (idle)

Channel Power

25.82 dBm

Integration BW 2.000 MHz

Density -37.19 dBm/Hz

* Agilent 14:04:15 Nov 30, 2000

FCC ID: CKLTX-20B CDMA Ch. 1013

Ref 25.8 dBm

Atten 35 dB

Peak

Log

10

dB/

Offst

1

dB

DI

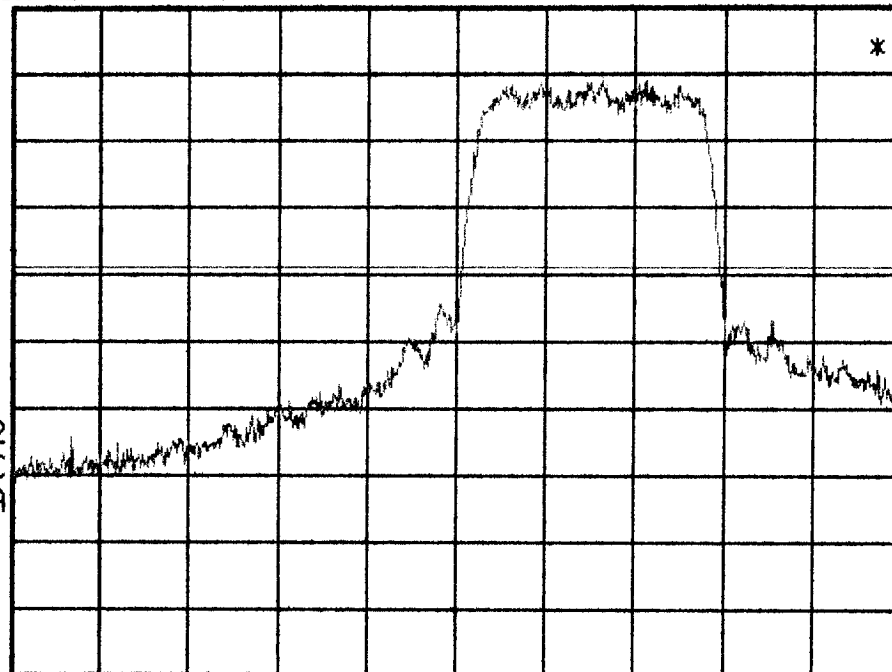
-13.0

dBm

V1 S2

S3 FC

AA



Center 824 MHz

Span 5 MHz

*Res BW 30 kHz

VBW 30 kHz

Sweep 13.89 ms (1000 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 14:06:35 Nov 30, 2000

FCC ID: CKLTX-20B CDMA Ch. 1013

Ref 25.8 dBm

Atten 35 dB

Peak

Log

10

dB/

Offst

1

dB

DI

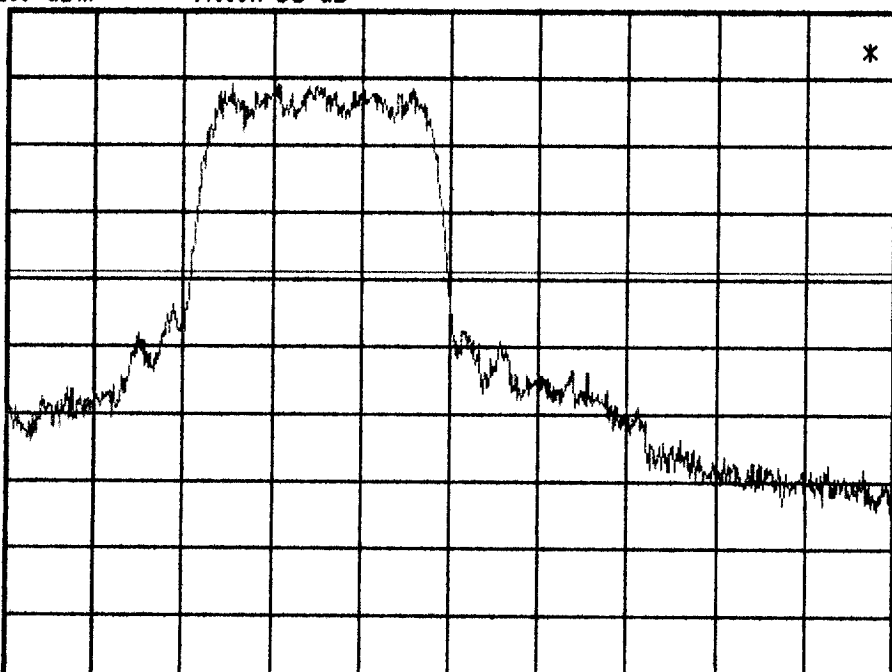
-13.0

dBm

V1 S2

S3 FC

AA



Center 849 MHz

Span 5 MHz

*Res BW 30 kHz

VBW 30 kHz

Sweep 13.89 ms (1000 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