

PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

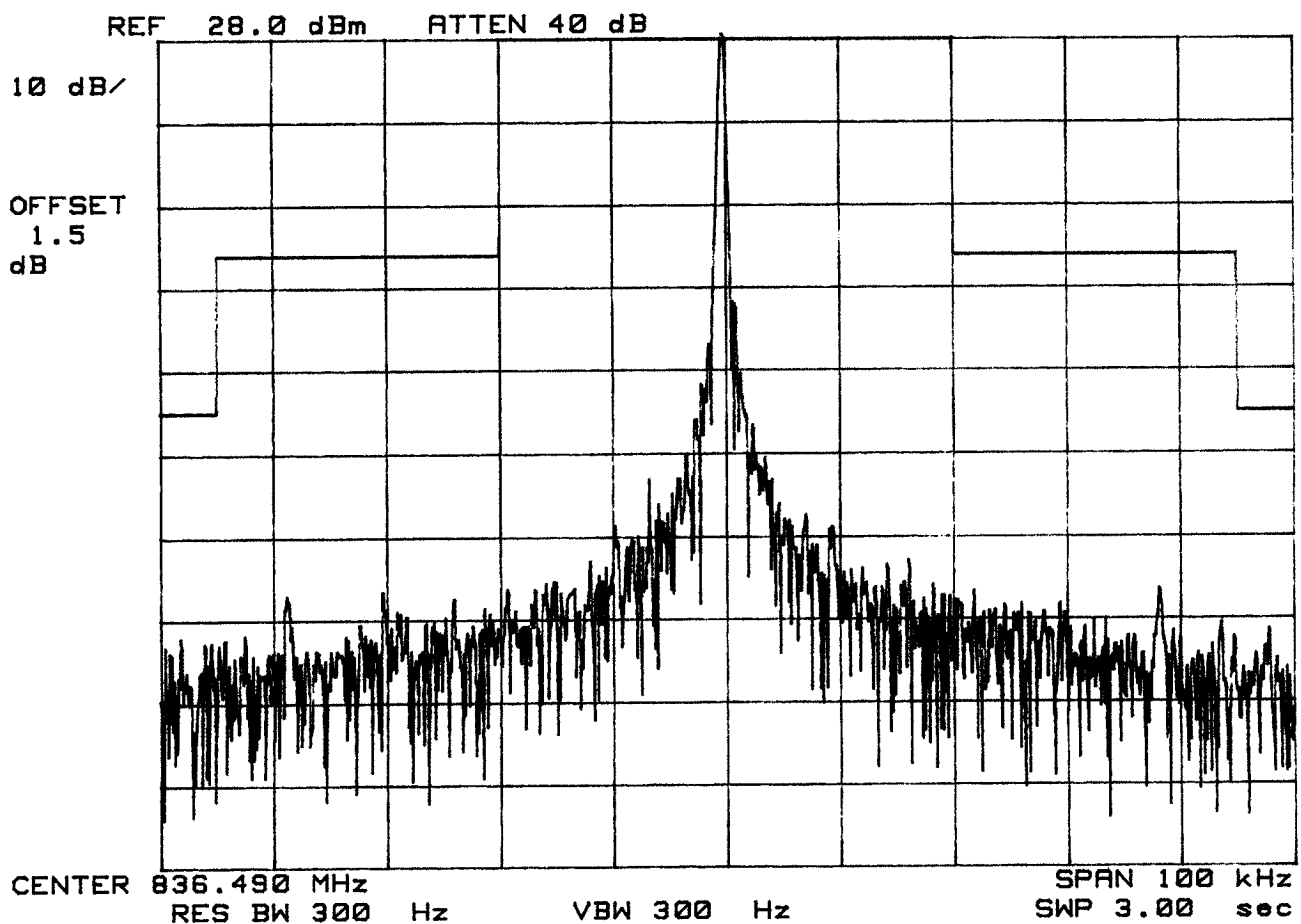
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:Unmodulated Signal



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

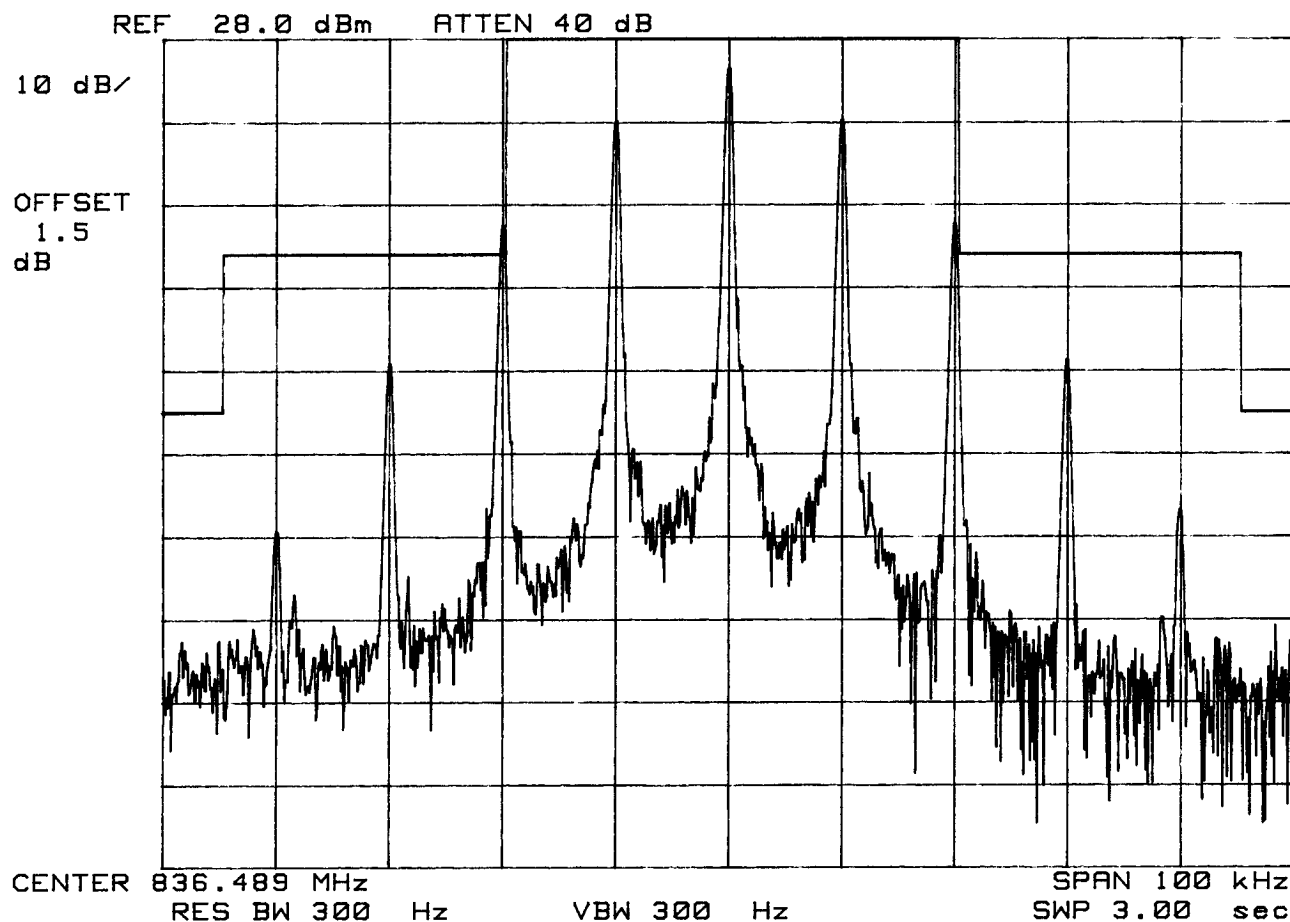
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:ST



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

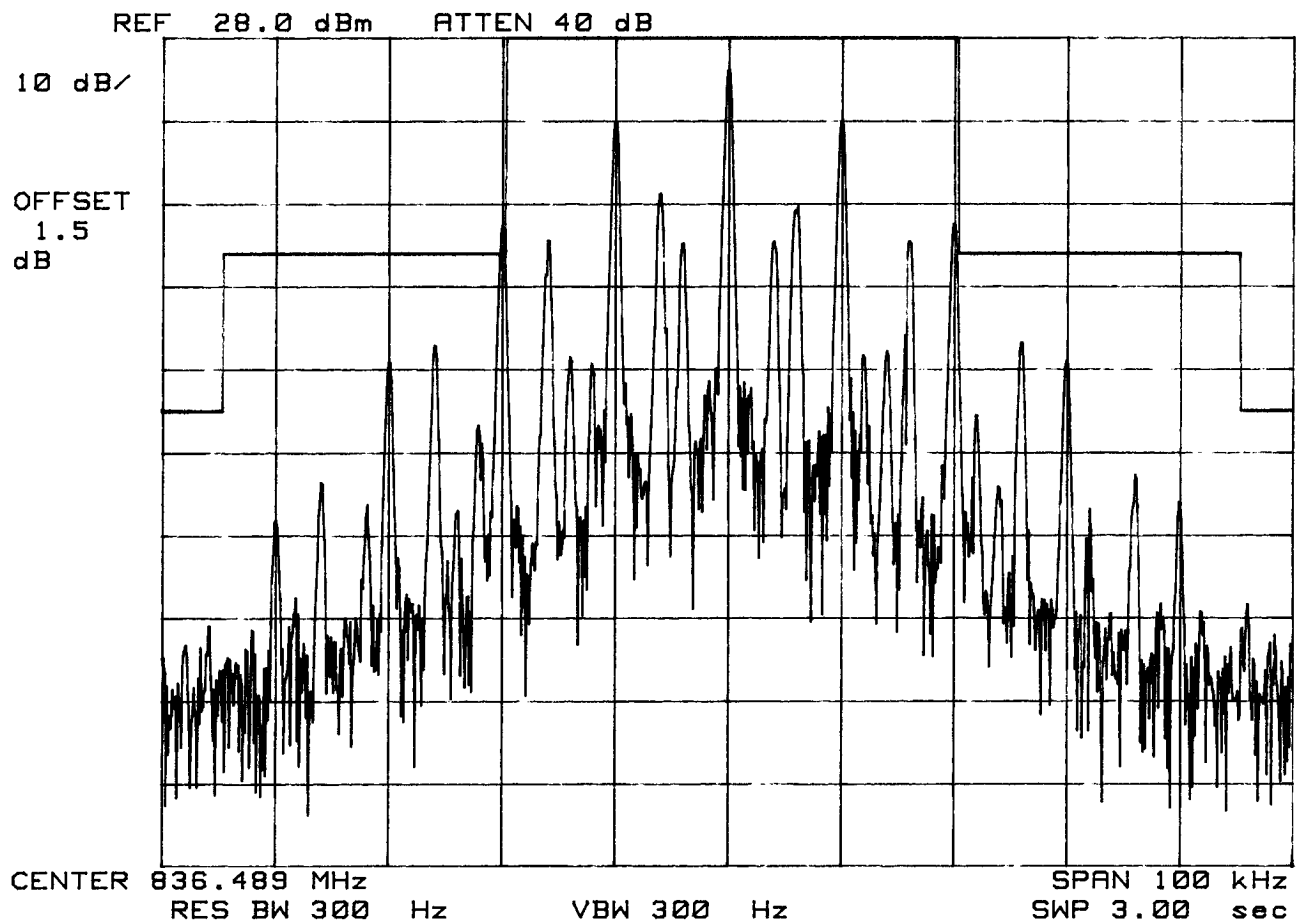
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:SAT + ST



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

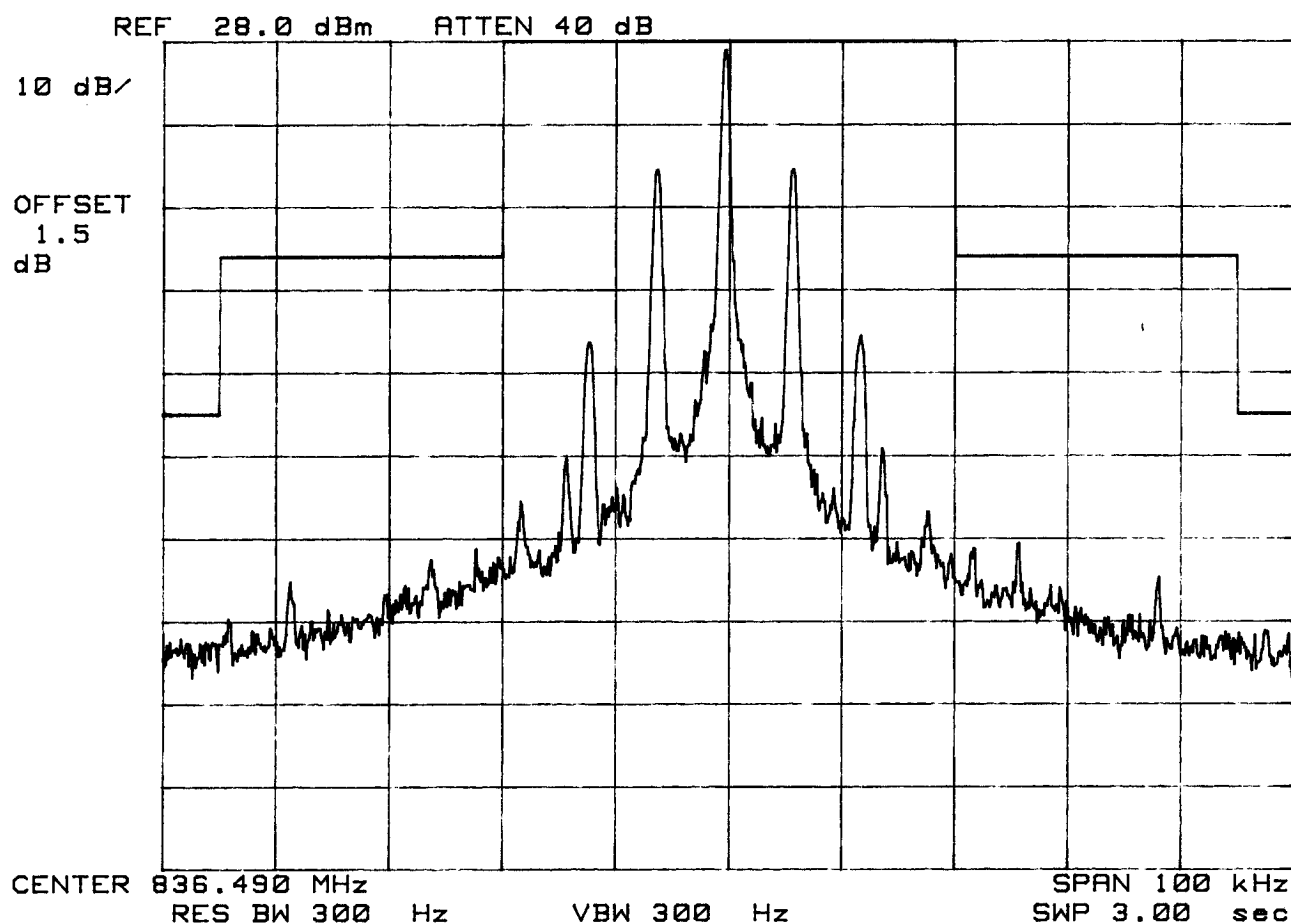
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:SAT



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SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

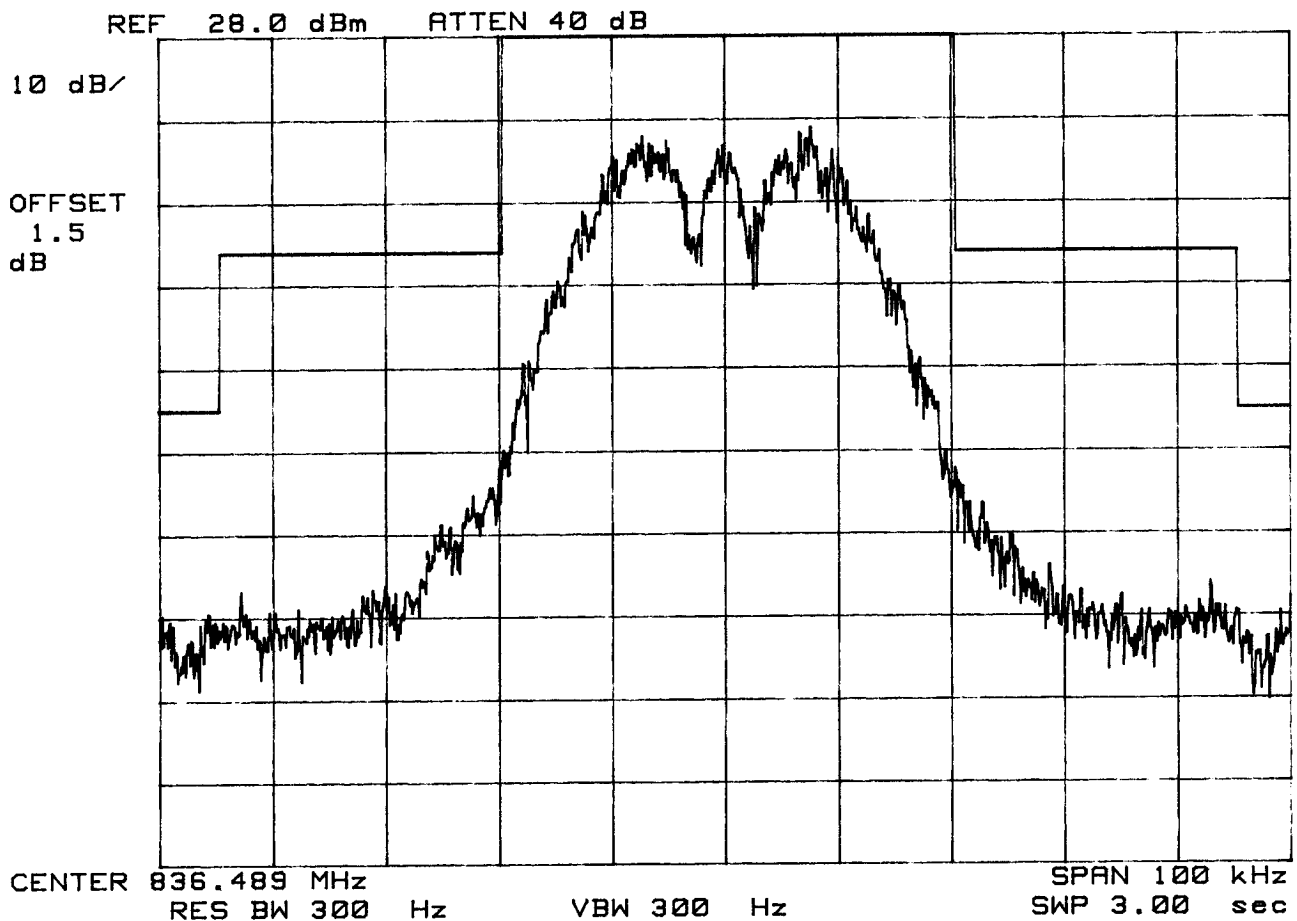
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:Voice



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:CKLHGC-300E

HYUNDAI DUAL MODE PHONE

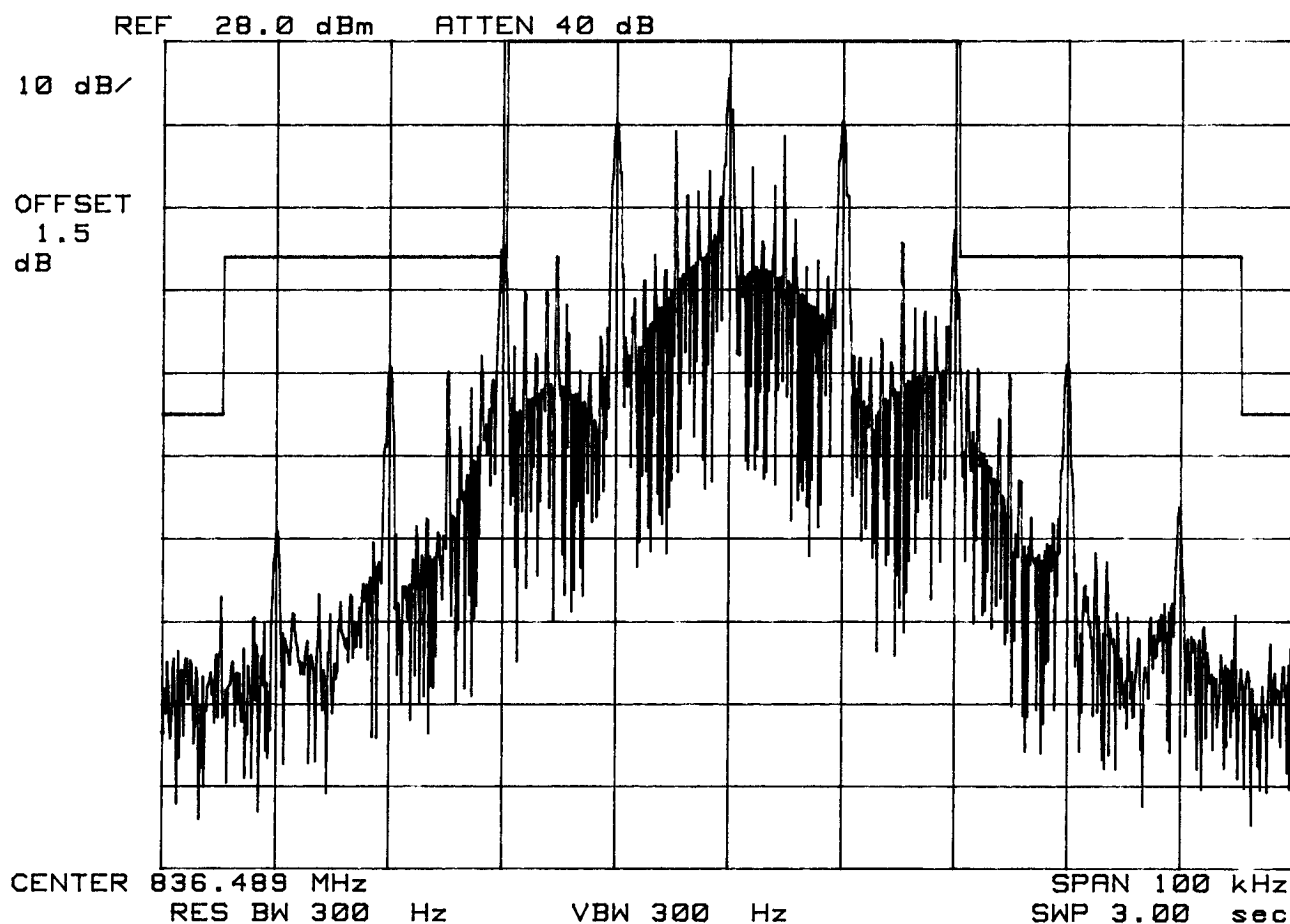
FM MODE

CHAN 383

Operating Frequency: 836.490 MHz

Output Power : 28.0 dBm

Test Mode:Wide Band Data



hp 13:32:26 Mar 15, 2000

FCC ID:CKLHGC-300E CON SPURS C-0383

Mkr1 1.601 GHz

Ref 28 dBm

Atten 40 dB

-30.96 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-13.0

dBm

V1 S2

S3 FC

AA

Start 20 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.2 ms

Freq/Channel

Center Freq

1.26000000 GHz

Start Freq

20.0000000 MHz

Stop Freq

2.50000000 GHz

CF Step

248.000000 MHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

On Off

hp 13:33:20 Mar 15, 2000

FCC ID:CKLHGC-300E CON SPURS C-0383

Mkr1 7.356 GHz

Ref 28 dBm

Atten 40 dB

-29.6 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-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

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 13:59:13 Mar 15, 2000

FCC ID:CKLHGC-300E CON SPURS C-1013

Mkr1 1.576 GHz

Ref 25.8 dBm

Atten 35 dB

-33.04 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-13.0

dBm

V1 S2

S3 FC

AA

Start 20 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.2 ms

Freq/Channel

Center Freq

1.26000000 GHz

Start Freq

20.0000000 MHz

Stop Freq

2.50000000 GHz

CF Step

248.000000 MHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

On Off

hp 14:00:04 Mar 15, 2000

FCC ID:CKLHGC-300E CON SPURS C-1013

Mkr1 7.225 GHz

Ref 25.8 dBm

Atten 35 dB

-32.93 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-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

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



07:34:54 Mar 16, 2000

FCC ID: CKLHGC-300E CON SPURS C-0363

Mkr1 1.570 GHz

Ref 25.8 dBm

Atten 35 dB

-33.94 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-13.0

dBm

V1 S2

S3 FC

AA

Start 20 MHz

*Res BW 1 MHz

*VBW 1 MHz

Stop 2.5 GHz

Sweep 6.2 ms

Freq/Channel

Center Freq

1.26000000 GHz

Start Freq

20.0000000 MHz

Stop Freq

2.50000000 GHz

CF Step

849.000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off



07:35:59 Mar 16, 2000

FCC ID: CKLHGC-300E CON SPURS C-0363

Mkr1 7.356 GHz

Ref 25.8 dBm

Atten 35 dB

-33.2 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-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

Freq/Channel

Center Freq

6.25000000 GHz

Start Freq

2.50000000 GHz

Stop Freq

10.0000000 GHz

CF Step

849.000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

hp 07:30:40 Mar 16, 2000

FCC ID: CKLHGC-300E CON SPURS C-0777

Ref 25.8 dBm Atten 35 dB

Peak

Log

10

dB/

Offst

1.5

dB

DI

-13.0

dBm

V1 S2

S3 FC

AA

Start 10 MHz

*Res BW 1 MHz

*VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms

Display

Full Screen>

Display Line

-13.00 dBm

On

Off

Limits>

Title>

Preferences>

hp 07:31:28 Mar 16, 2000

FCC ID: CKLHGC-300E CON SPURS C-0777

Ref 25.8 dBm Atten 35 dB

Mkr1 7.188 GHz

-32.57 dBm

Peak

Log

10

dB/

Offst

1.5

dB

DI

-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

Freq/Channel

Center Freq

6.25000000 GHz

Start Freq

2.50000000 GHz

Stop Freq

10.00000000 GHz

CF Step

849.000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

hp 06:59:16 Mar 16, 2000

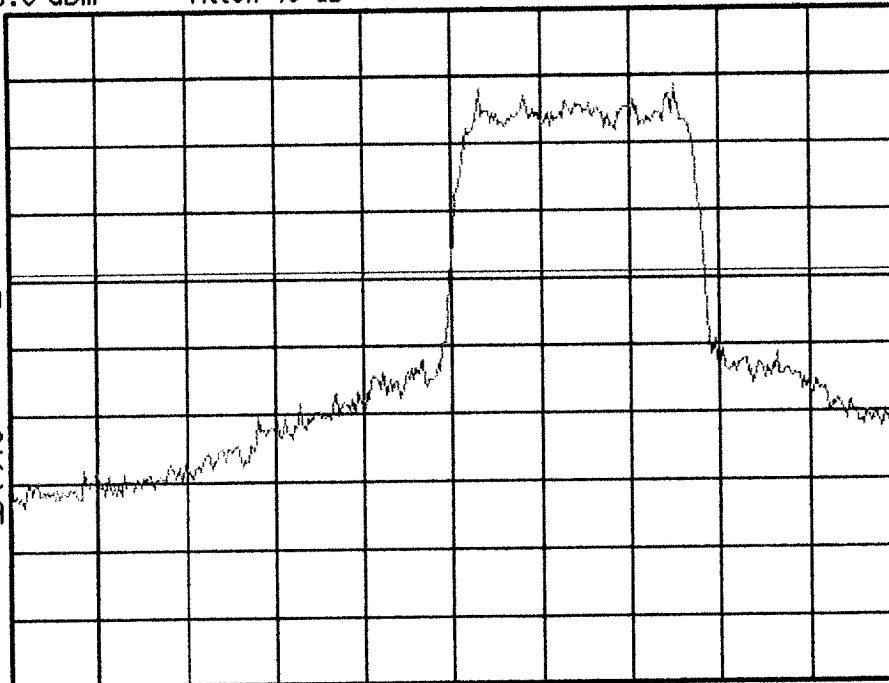
FCC ID: CKLHGC-300E BAND EDGE C-1013

Ref 25.8 dBm Atten 40 dB

Peak
Log
10
dB/

DI
-13.0
dBm

V1 S2
S3 FC
AA



Center 824 MHz

Res BW 30 kHz

VBW 30 kHz

Span 5 MHz

Sweep 13.89 ms

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

hp 07:03:44 Mar 16, 2000

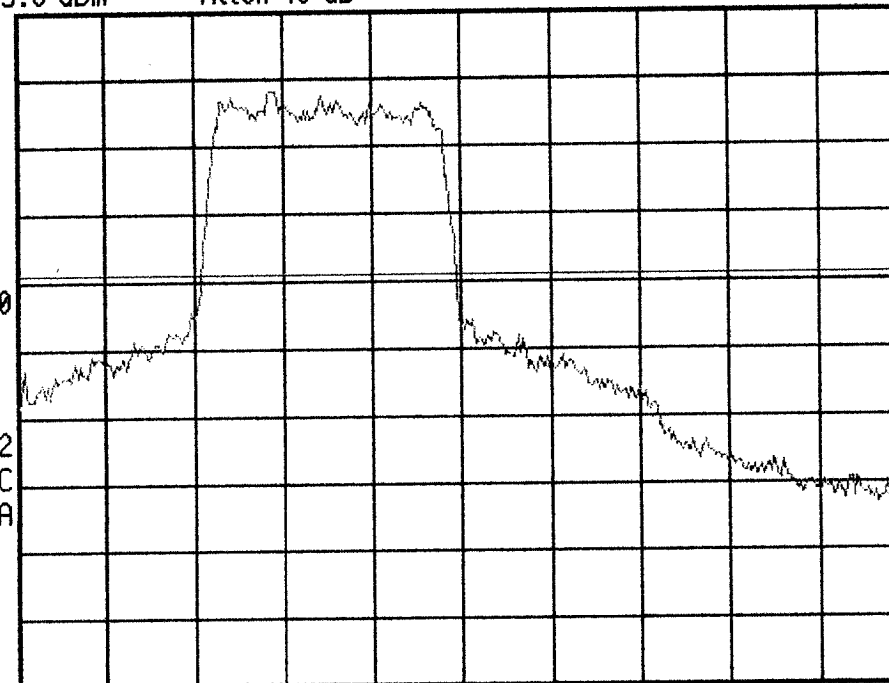
FCC ID: CKLHGC-300E BAND EDGE C-777

Ref 25.8 dBm Atten 40 dB

Peak
Log
10
dB/

DI
-13.0
dBm

V1 S2
S3 FC
AA



Center 849 MHz

Res BW 30 kHz

VBW 30 kHz

Span 5 MHz

Sweep 13.89 ms

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

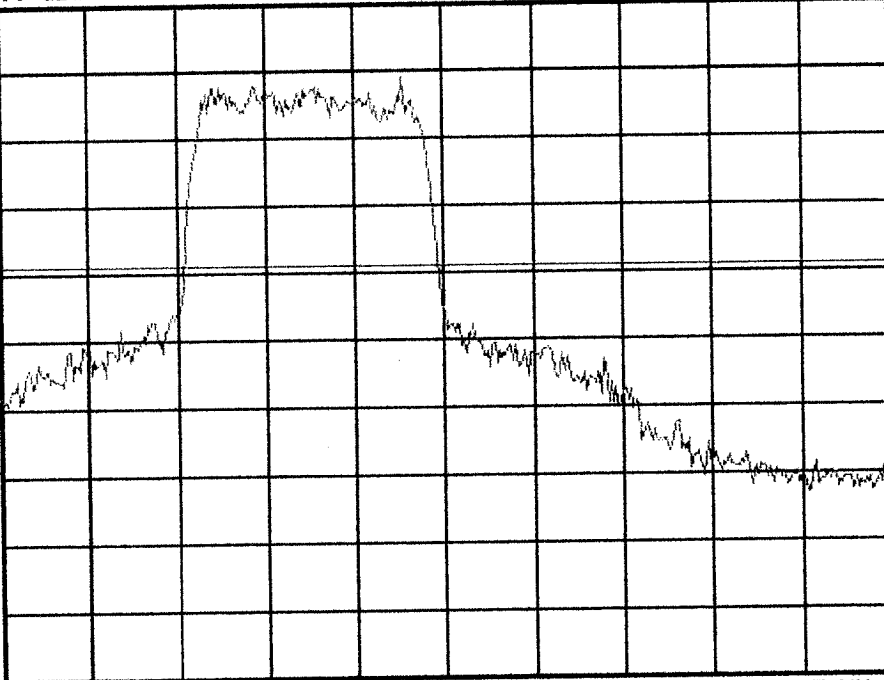
hp 07:08:32 Mar 16, 2000

FCC ID: CKLHGC-300E BAND EDGE C-777

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1.5
dB
DI
-13.0
dBm

V1 S2
S3 FC
AA



Center 849 MHz

*Res BW 30 kHz

*VBW 30 kHz

Span 5 MHz
Sweep 13.89 ms

Trace

Trace

1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More

1 of 2

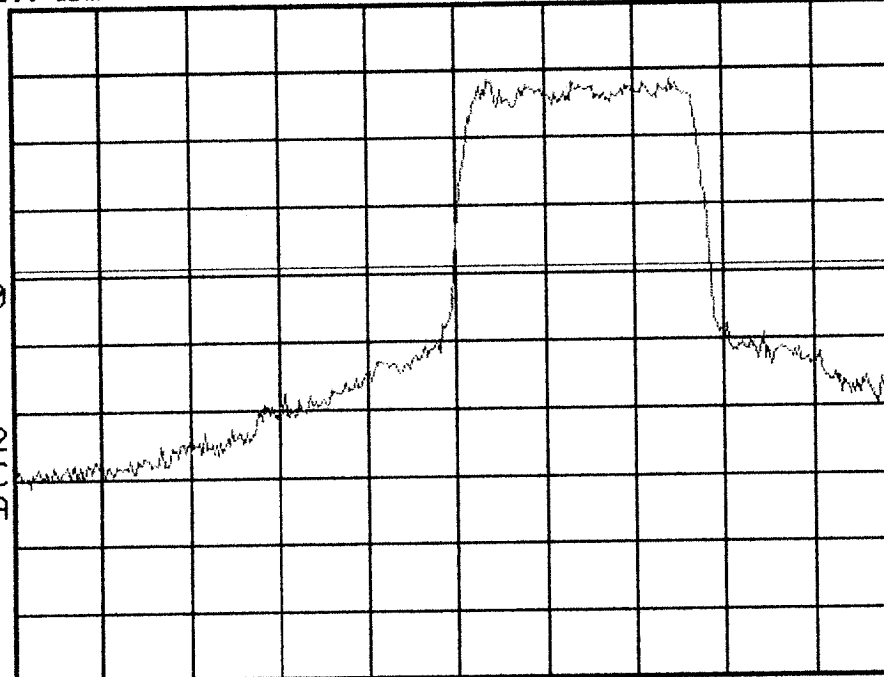
hp 07:12:53 Mar 16, 2000

FCC ID: CKLHGC-300E BAND EDGE C-1013

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1.5
dB
DI
-13.0
dBm

V1 S2
S3 FC
AA



Center 824 MHz

*Res BW 30 kHz

*VBW 30 kHz

Span 5 MHz
Sweep 13.89 ms

Freq/Channel

Center Freq

824.000000 MHz

Start Freq

821.500000 MHz

Stop Freq

826.500000 MHz

CF Step

849.000000 MHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

On Off

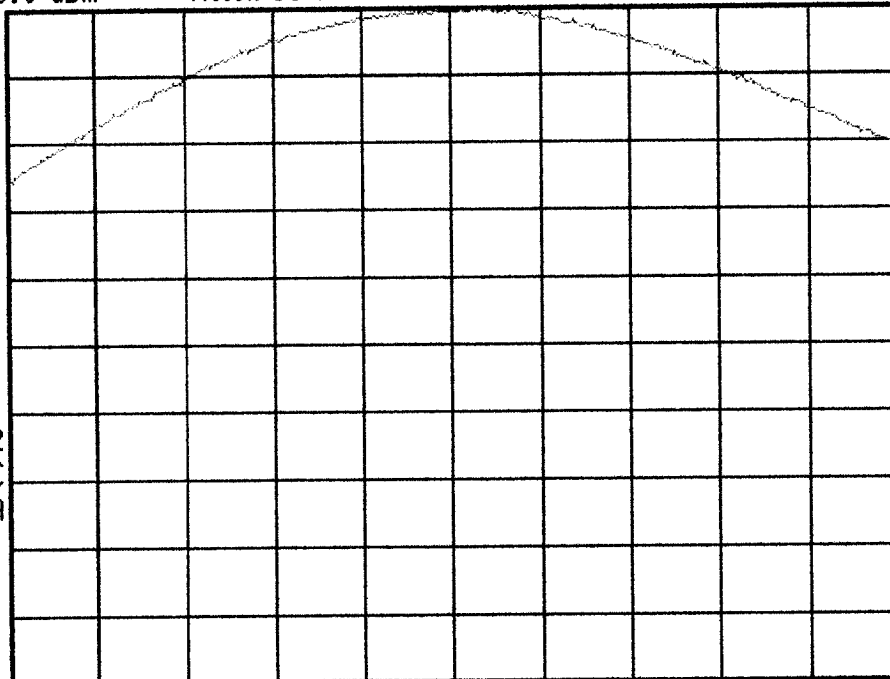
hp 07:16:26 Mar 16, 2000

FCC ID: CKLHGC-300E PWR OUT C-1013

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1.5
dB

V1 S2
S3 FC
AA



Center 824.7 MHz

*Res BW 3 MHz

*VBW 3 MHz

Span 10 MHz

Sweep 5 ms

Trace

Trace

1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More

1 of 2

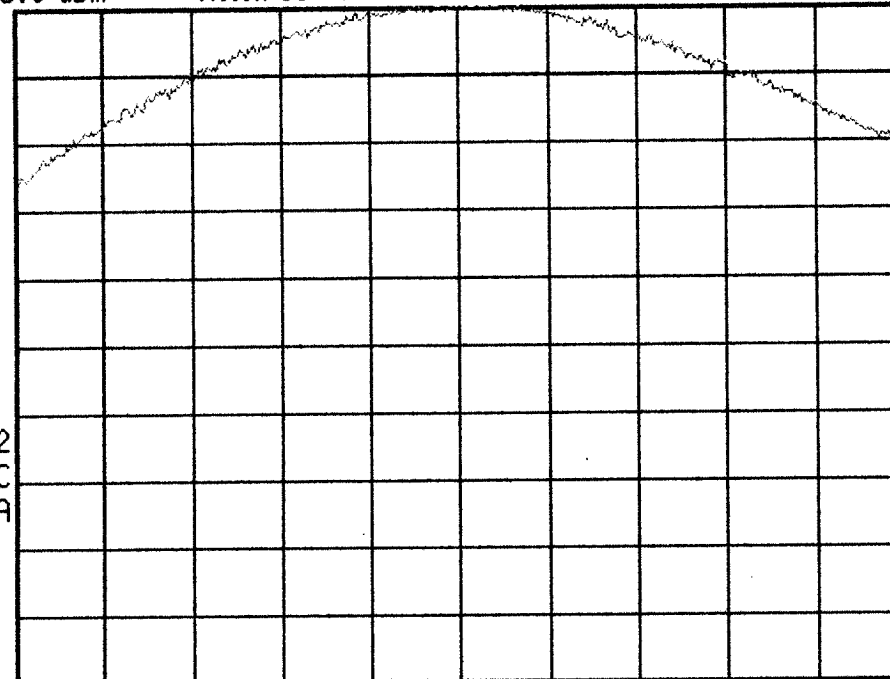
hp 07:19:35 Mar 16, 2000

FCC ID: CKLHGC-300E PWR OUT C-0363

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1.5
dB

V1 S2
S3 FC
AA



Center 835.9 MHz

*Res BW 3 MHz

*VBW 3 MHz

Span 10 MHz

Sweep 5 ms

Freq/Channel

Center Freq

835.890000 MHz

Start Freq

830.890000 MHz

Stop Freq

840.890000 MHz

CF Step

849.000000 MHz

Auto Man

Freq Offset

0.00000000 Hz

Signal Track

On Off

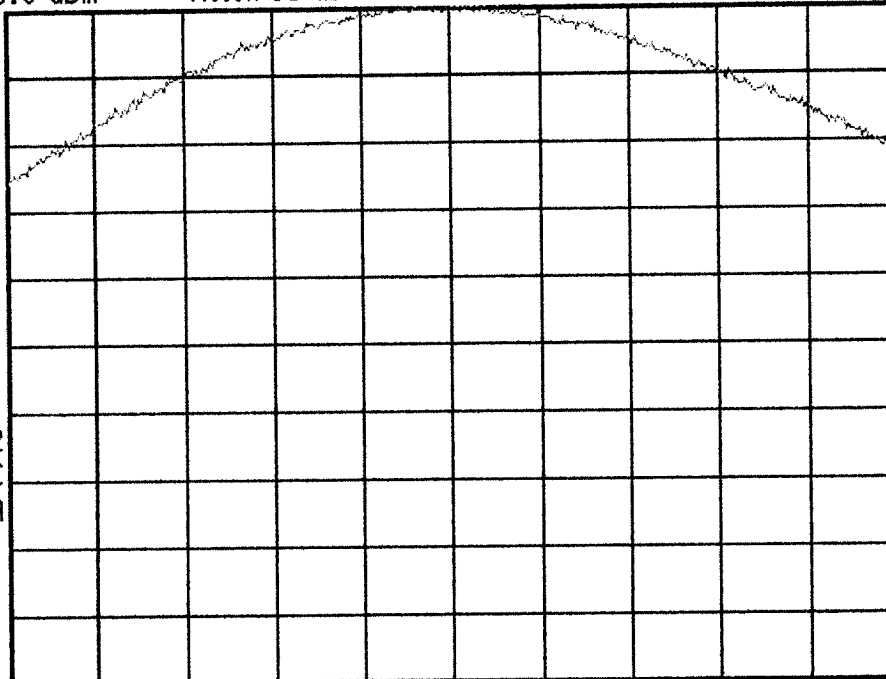
hp 07:21:53 Mar 16, 2000

FCC ID: CKLHGC-300E PWR OUT C-0363

Ref 25.8 dBm Atten 35 dB

Peak
Log
10
dB/
Offst
1.5
dB

V1 S2
S3 FC
AA



Center 848.3 MHz

*Res BW 3 MHz

*VBW 3 MHz

Span 10 MHz

Sweep 5 ms

Freq/Channel

Center Freq
848.310000 MHz

Start Freq
843.310000 MHz

Stop Freq
853.310000 MHz

CF Step
849.000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

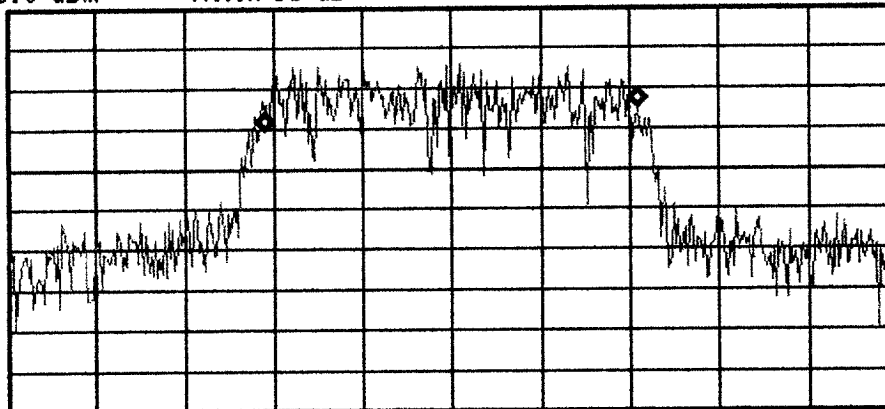
Signal Track
On Off

hp 07:25:25 Mar 16, 2000

FCC ID: CKLHGC-300E 99%BW C -0777

Ref 25.8 dBm Atten 35 dB

Samp
Log
10
dB/
Offst
1.5
dB



Center 848.3 MHz

*Res BW 30 kHz

*VBW 300 kHz

Span 3 MHz

Sweep 9.167 ms

Freq/Channel

Center Freq
848.310000 MHz

Start Freq
846.810000 MHz

Stop Freq
849.810000 MHz

CF Step
849.000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

Occupied Bandwidth Results (idle)

Occupied Bandwidth
1.252 MHz

Occ BW % Pwr 99.00 %

Transmit Freq Error -7.083 kHz

hp FCC ID CKLHGC-300E RX

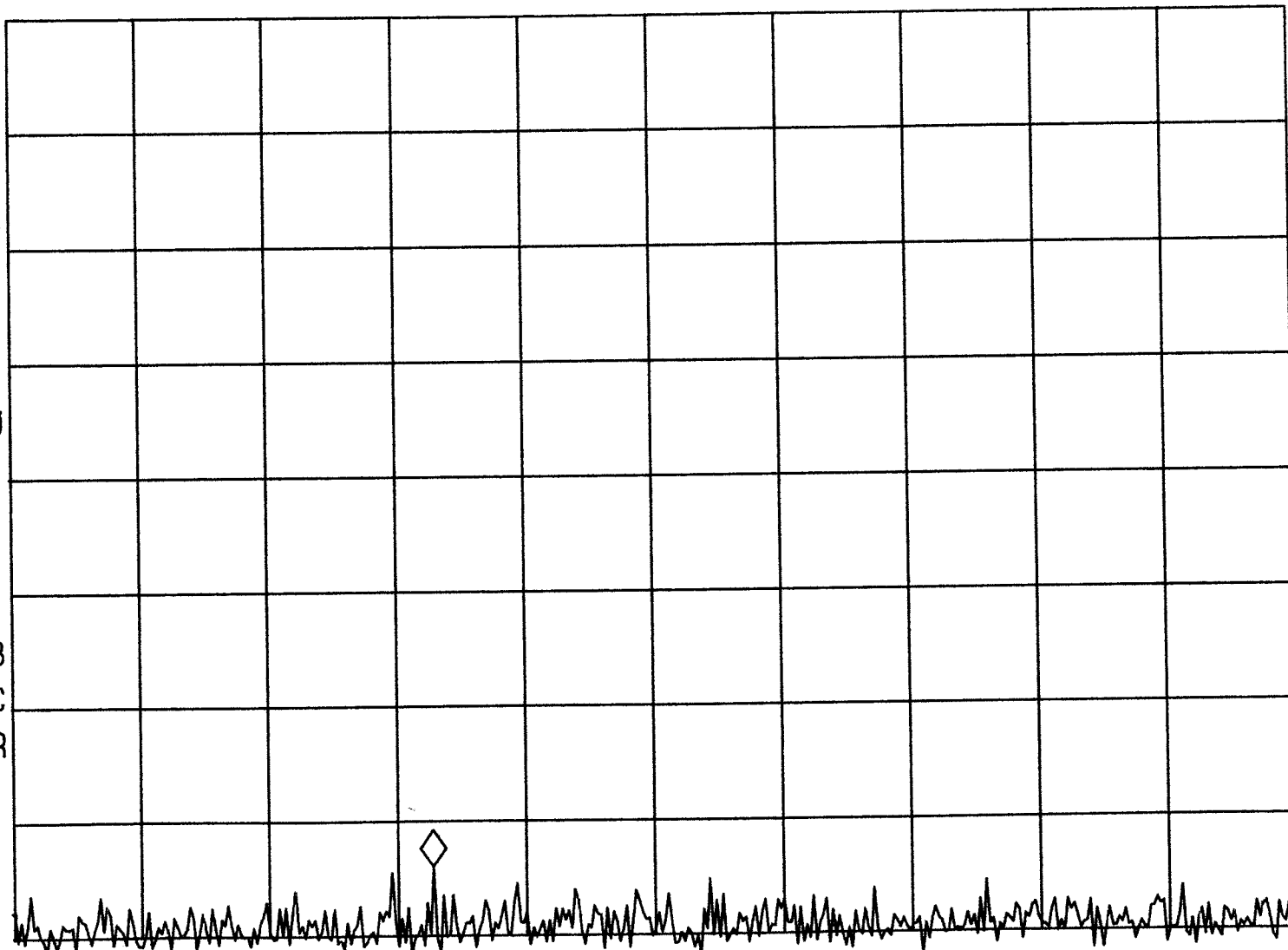
MKR 877.19 MHz

REF -60.0 dBm ATTN 10 dB PG 26.0 dB

-96.98 dBm

PEAK
LOG
5
dB/
OFFST
6.0
dB
DL
-80.0
dBm

VA SB
SC FC
CORR



START 869.00 MHz

STOP 894.00 MHz

#RES BW 100 kHz

#VBW 300 kHz

#SWP 100 msec