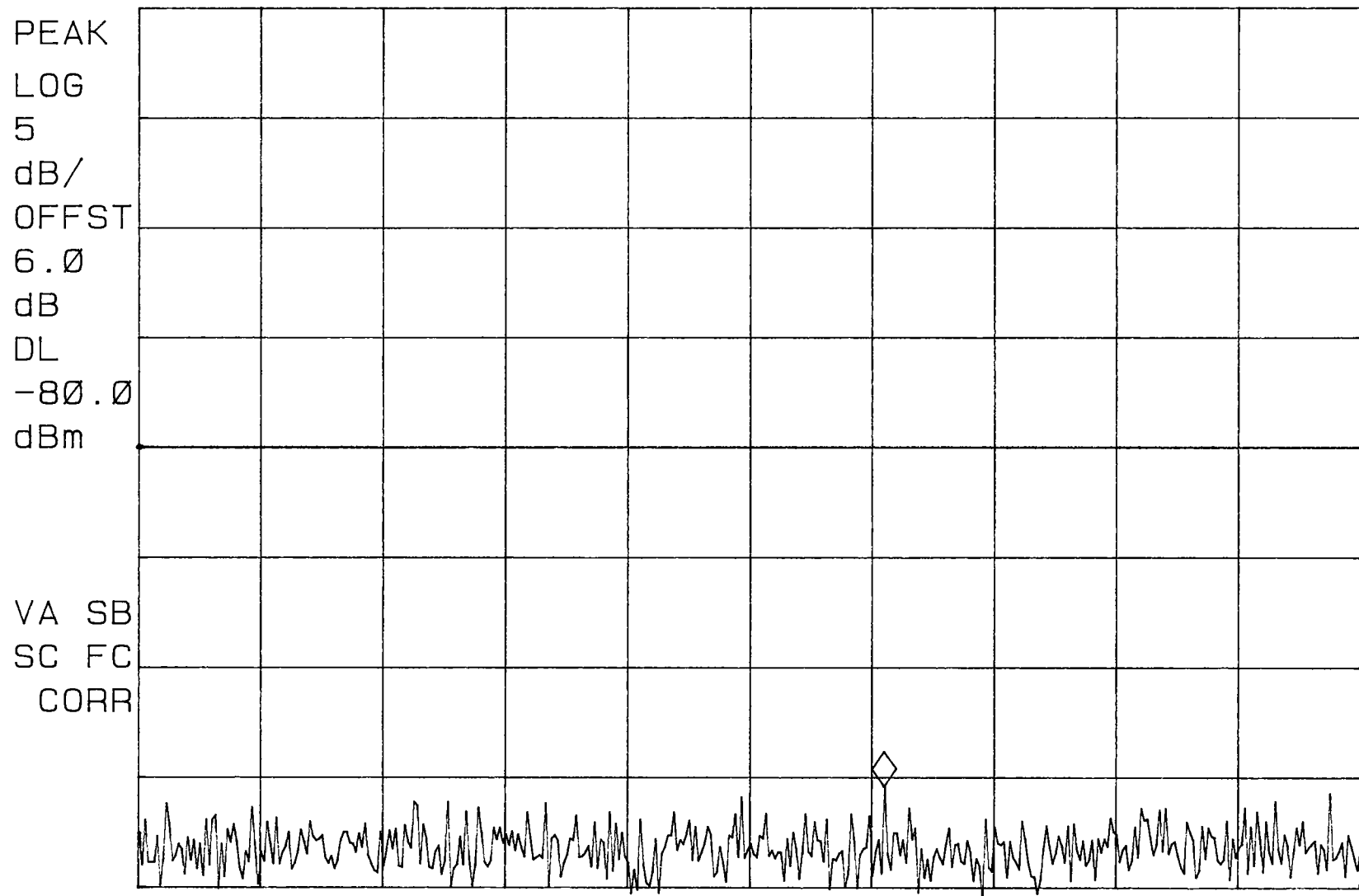
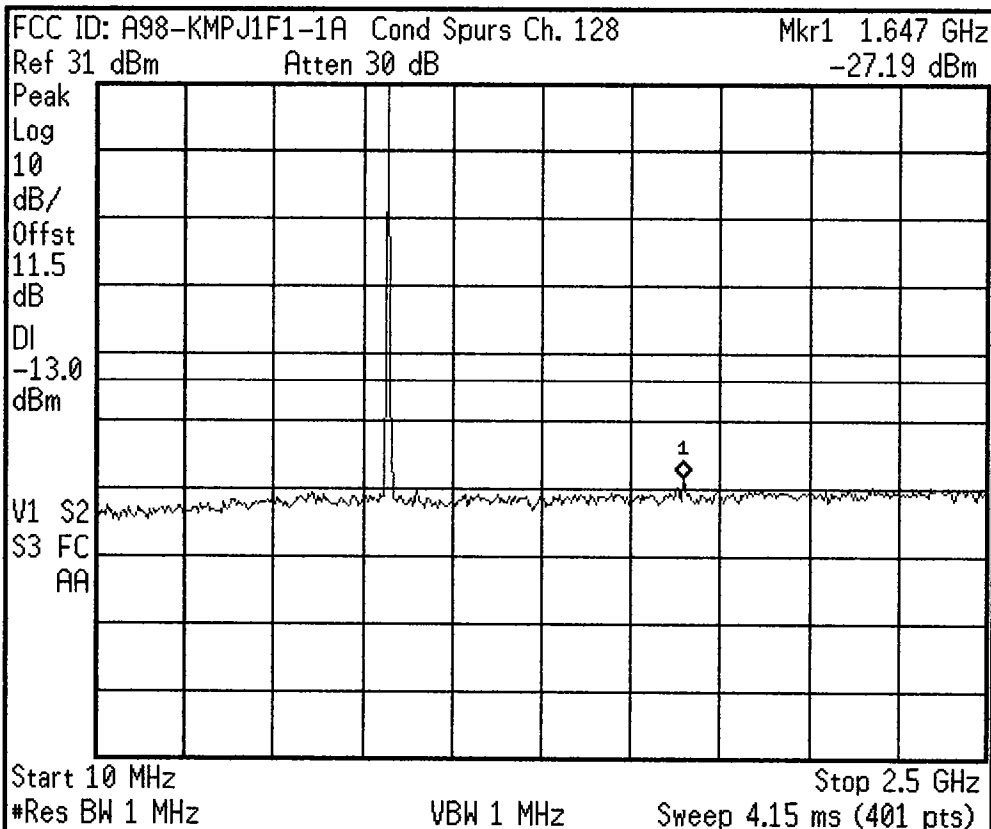


~~HP~~ FCC ID: A98-KMP6J1F1-1A GSM 800MHz. MKR 884.25 MHz
REF -60.0 dBm ATTEN 10 dB PG 25.0 dB -95.40 dBm



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

Agilent



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

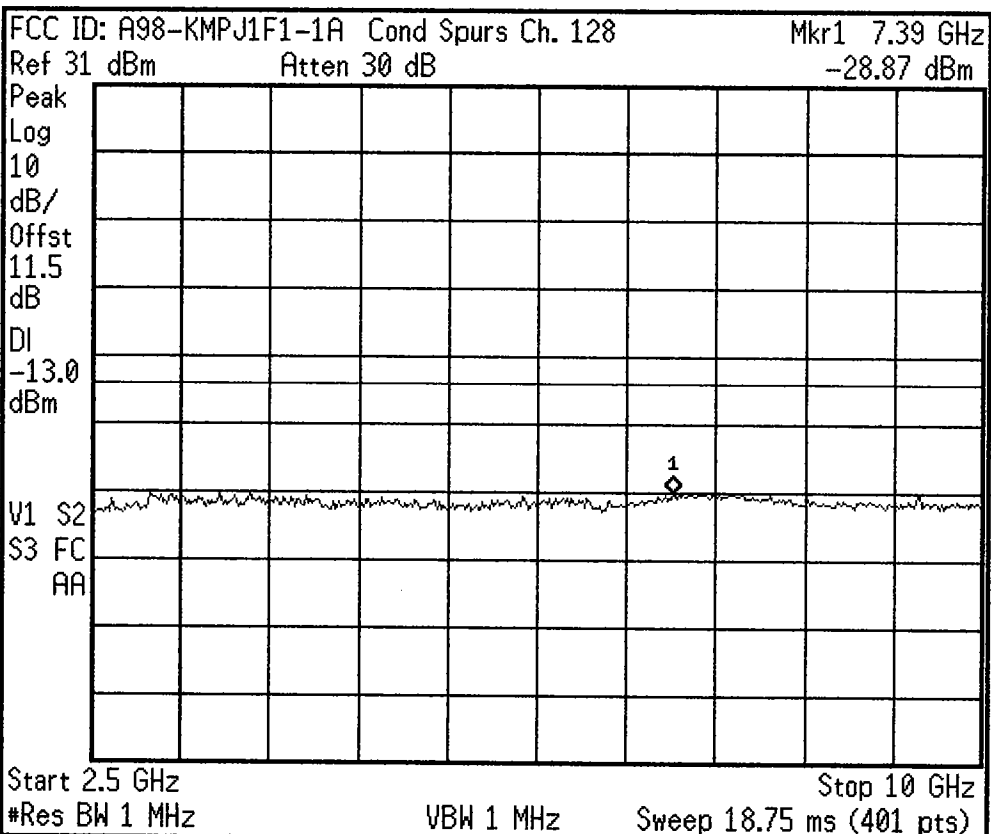
Off

Scale Type

Log

Lin

Agilent



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

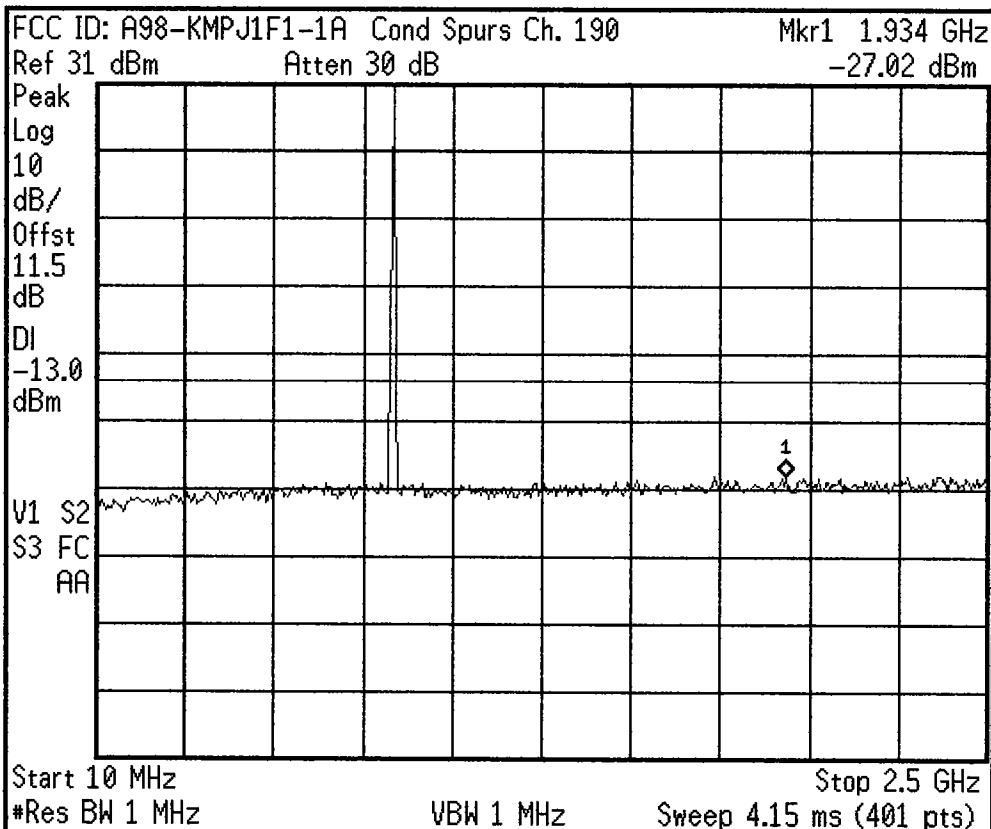
Off

Scale Type

Log

Lin

Agilent



Freq/Channel

Center Freq
 1.25500000 GHz

Start Freq
 10.0000000 MHz

Stop Freq
 2.50000000 GHz

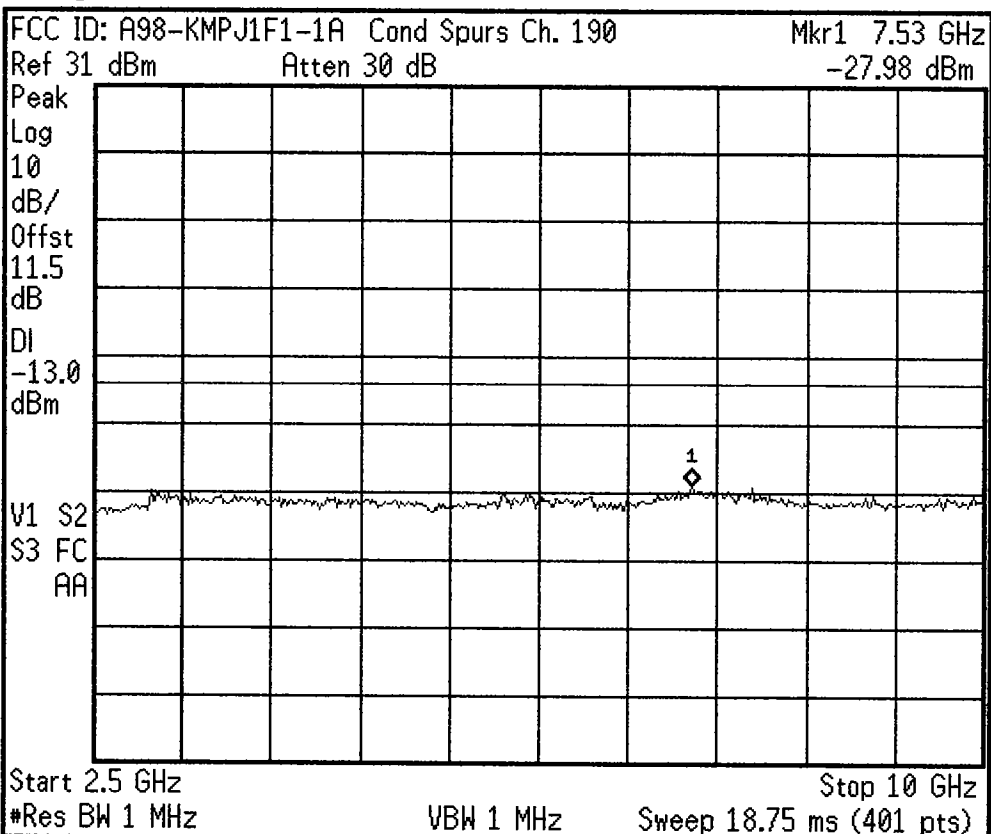
CF Step
 249.000000 MHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

Scale Type
 Log Lin

Agilent



Peak Search

Meas Tools

Next Peak

Next Pk Right

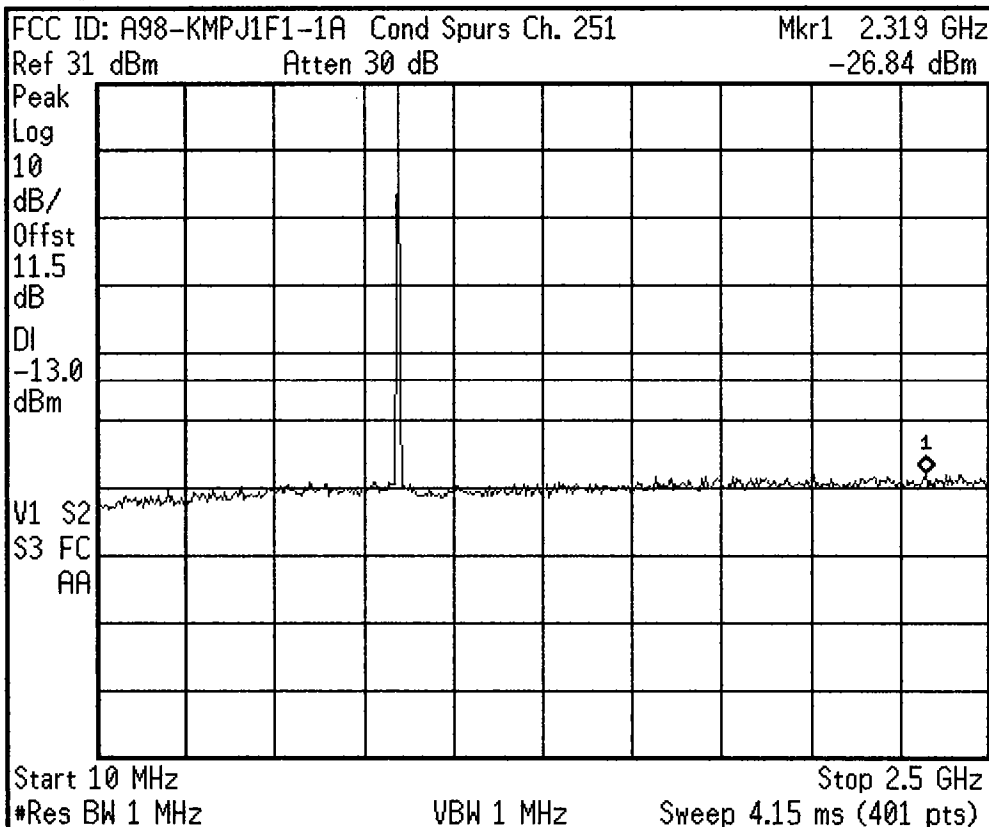
Next Pk Left

Min Search

Pk-Pk Search

More
 1 of 2

Agilent



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

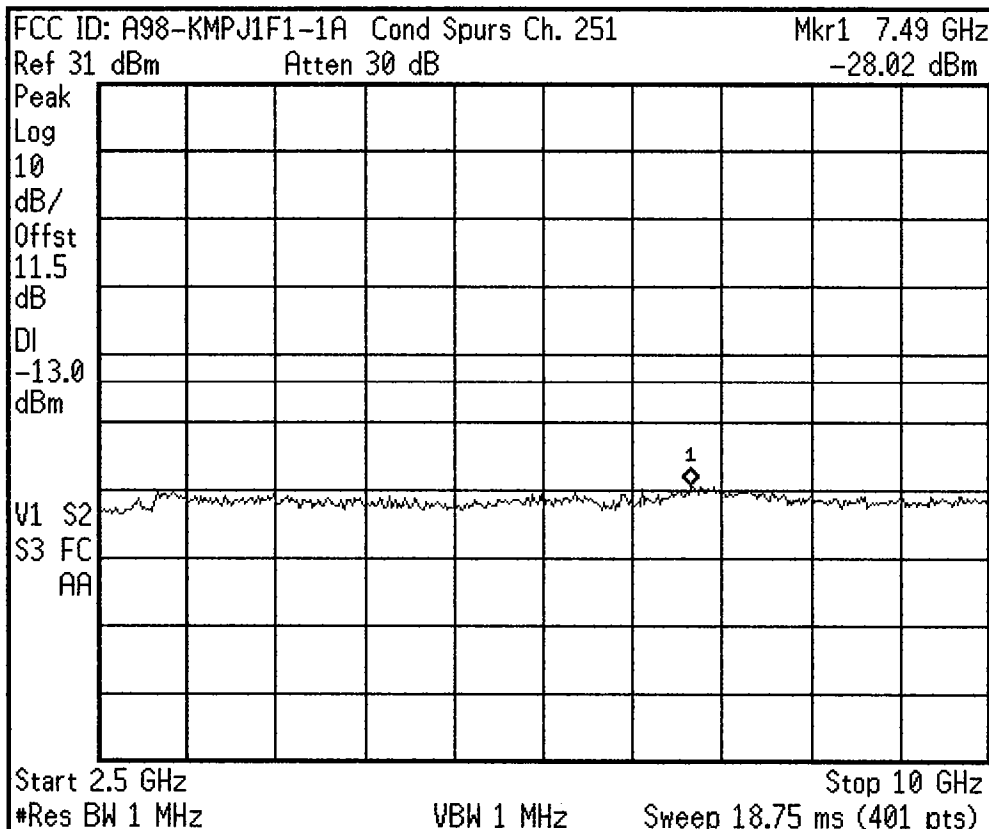
Off

Scale Type

Log

Lin

Agilent



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

Scale Type

Log

Lin

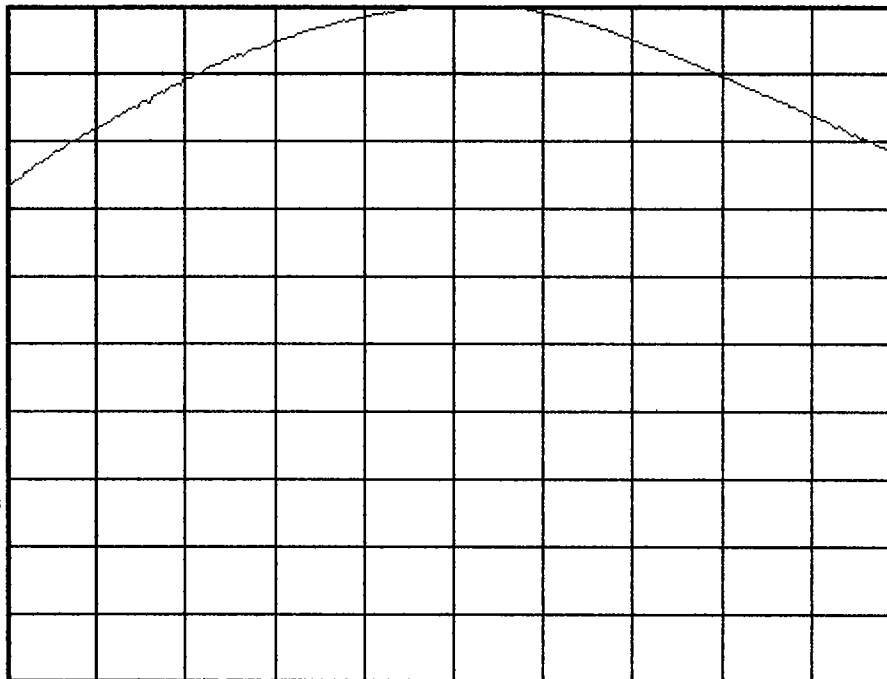
✱ Agilent

FCC ID: A98-KMPJ1F1-1A Power Out Ch. 128

Ref 31 dBm Atten 30 dB

Peak
Log
10
dB/
Offst
11.5
dB

V1 S2
S3 FC
AA



Center 824.2 MHz

*Res BW 3 MHz

VBW 3 MHz

Span 10 MHz
Sweep 4 ms (401 pts)

Freq/Channel

Center Freq

824.200000 MHz

Start Freq

819.200000 MHz

Stop Freq

829.200000 MHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

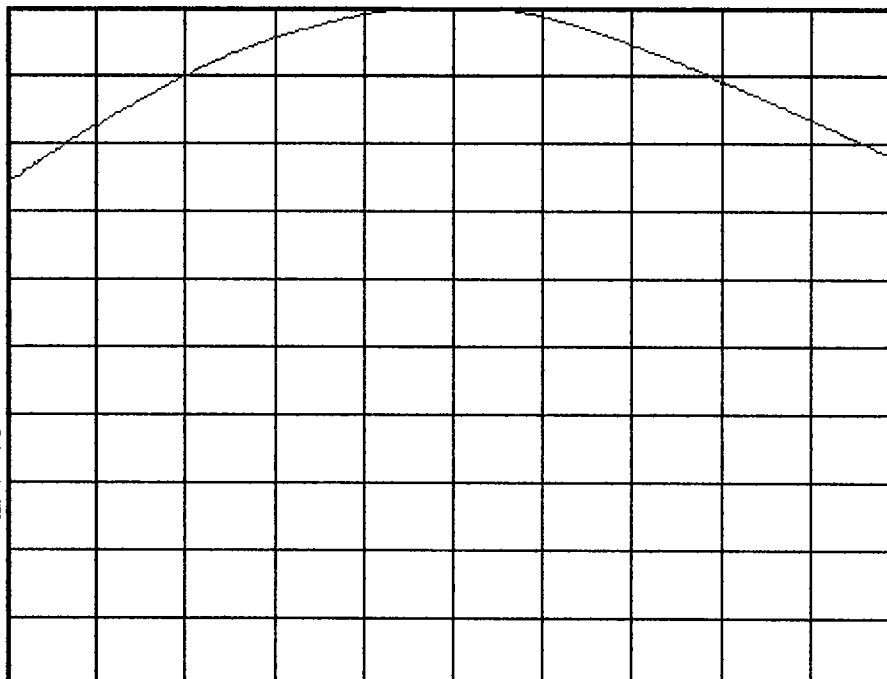
✱ Agilent

FCC ID: A98-KMPJ1F1-1A Power Out Ch. 190

Ref 31 dBm Atten 30 dB

Peak
Log
10
dB/
Offst
11.5
dB

V1 S2
S3 FC
AA



Center 836.7 MHz

*Res BW 3 MHz

VBW 3 MHz

Span 10 MHz
Sweep 4 ms (401 pts)

Freq/Channel

Center Freq

836.700000 MHz

Start Freq

831.700000 MHz

Stop Freq

841.700000 MHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

Agilent

FCC ID: A98-KMPJ1F1-1A Power Out Ch. 190

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

11.5

dB

V1 S2

S3 FC

AA

Center 836.7 MHz

*Res BW 3 MHz

VBW 3 MHz

Span 10 MHz

Sweep 4 ms (401 pts)

Freq/Channel

Center Freq

836.700000 MHz

Start Freq

831.700000 MHz

Stop Freq

841.700000 MHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

Agilent

FCC ID: A98-KMPJ1F1-1A Power Out Ch. 251

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

11.5

dB

V1 S2

S3 FC

AA

Center 848.8 MHz

*Res BW 3 MHz

VBW 3 MHz

Span 10 MHz

Sweep 4 ms (401 pts)

Freq/Channel

Center Freq

848.800000 MHz

Start Freq

843.800000 MHz

Stop Freq

853.800000 MHz

CF Step

1.00000000 MHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

* Agilent

FCC ID: A98-KMP6J1F1-1A Band Edge Ch. 512

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

13

dB

DI

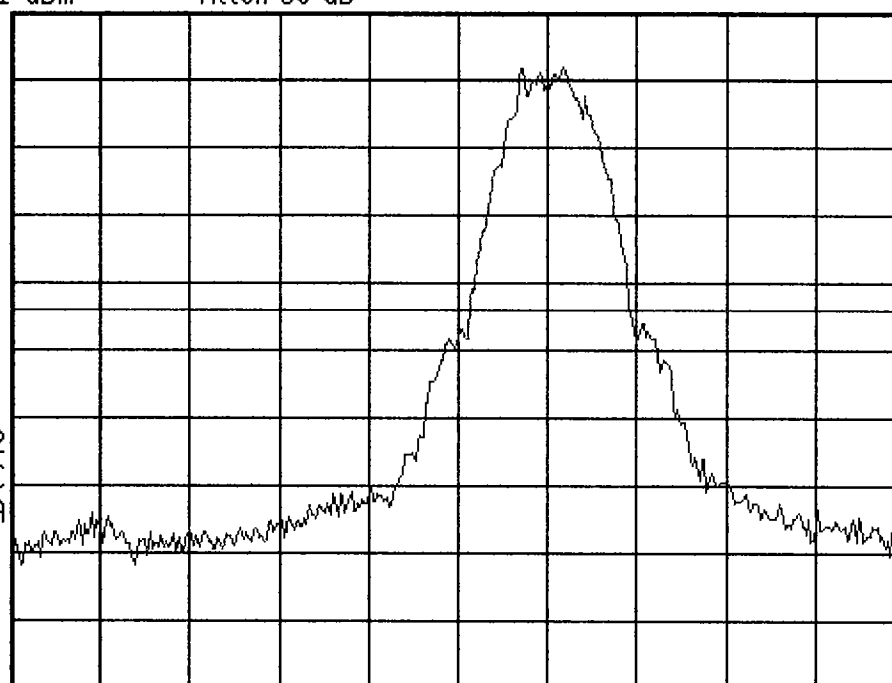
-13.0

dBm

V1 S2

S3 FC

AA



Center 1.85 GHz

Span 2 MHz

*Res BW 10 kHz

VBW 10 kHz

Sweep 25.77 ms (401 pts)

Freq/Channel

Center Freq

1.85000000 GHz

Start Freq

1.84900000 GHz

Stop Freq

1.85100000 GHz

CF Step

200.000000 kHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

* Agilent

FCC ID: A98-KMP6J1F1-1A Band Edge Ch. 810

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

13

dB

DI

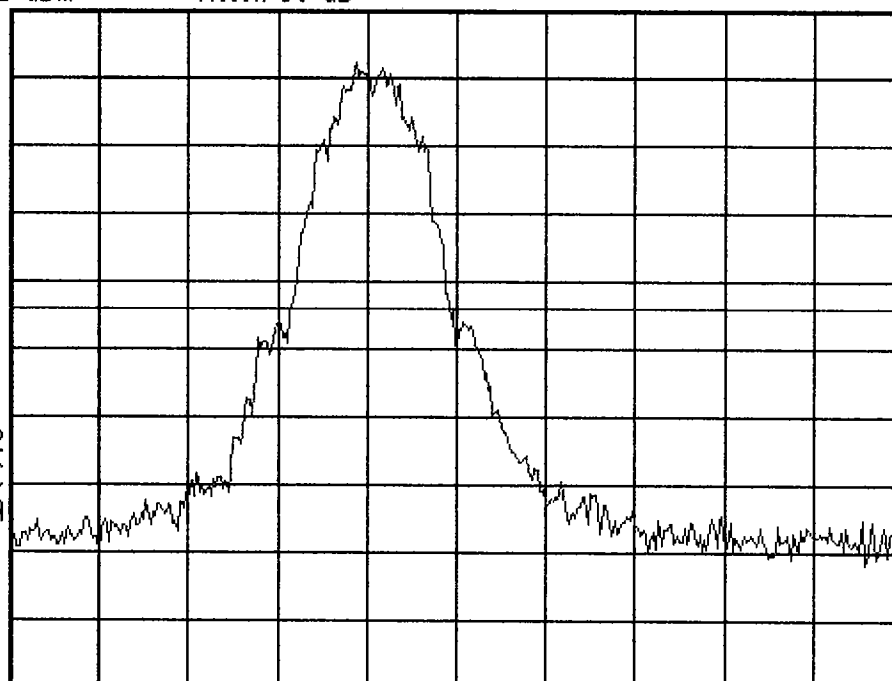
-13.0

dBm

V1 S2

S3 FC

AA



Center 1.91 GHz

Span 2 MHz

*Res BW 10 kHz

VBW 10 kHz

Sweep 25.77 ms (401 pts)

Freq/Channel

Center Freq

1.91000000 GHz

Start Freq

1.90900000 GHz

Stop Freq

1.91100000 GHz

CF Step

200.000000 kHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

* Agilent

FCC ID: A98-KMPJ1F1-1A Band Edge Ch. 128

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

11.5

dB

DI

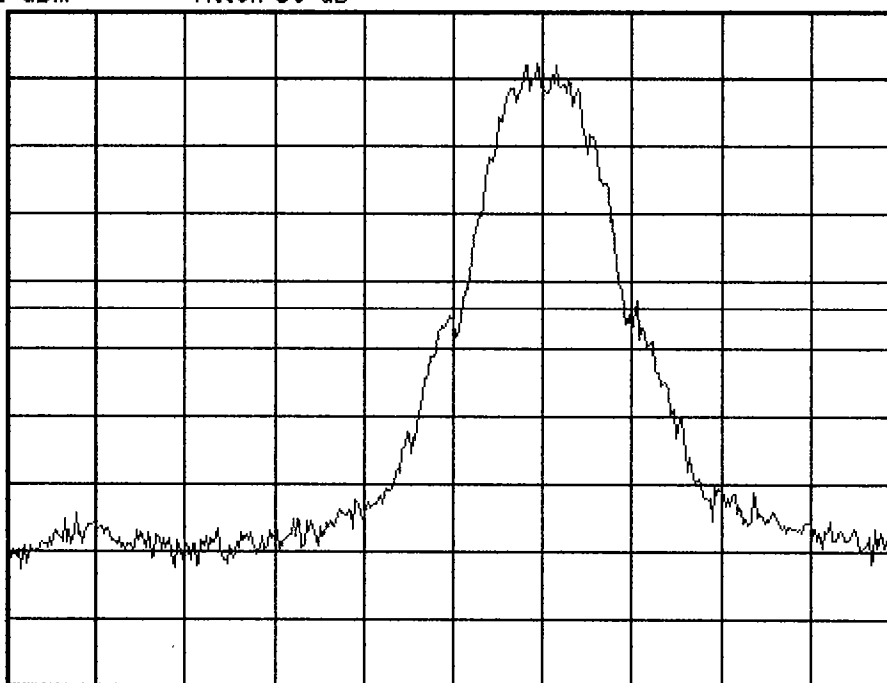
-13.0

dBm

V1 S2

S3 FC

AA



Center 824 MHz

Span 2 MHz

*Res BW 10 kHz

VBW 10 kHz

Sweep 25.77 ms (401 pts)

Freq/Channel

Center Freq

824.000000 MHz

Start Freq

823.000000 MHz

Stop Freq

825.000000 MHz

CF Step

200.000000 kHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

Off

Scale Type

Log

Lin

* Agilent

FCC ID: A98-KMPJ1F1-1A Band Edge Ch. 251

Ref 31 dBm

Atten 30 dB

Peak

Log

10

dB/

Offst

11.5

dB

DI

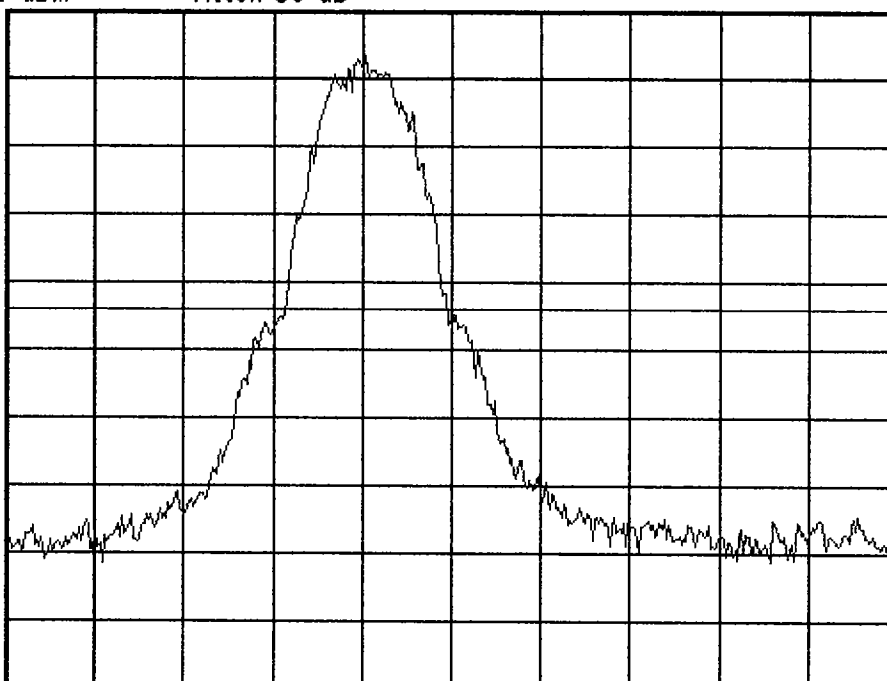
-13.0

dBm

V1 S2

S3 FC

AA



Center 849 MHz

Span 2 MHz

*Res BW 10 kHz

VBW 10 kHz

Sweep 25.77 ms (401 pts)

Freq/Channel

Center Freq

849.000000 MHz

Start Freq

848.000000 MHz

Stop Freq

850.000000 MHz

CF Step

200.000000 kHz

Auto

Man

Freq Offset

0.00000000 Hz

Signal Track

On

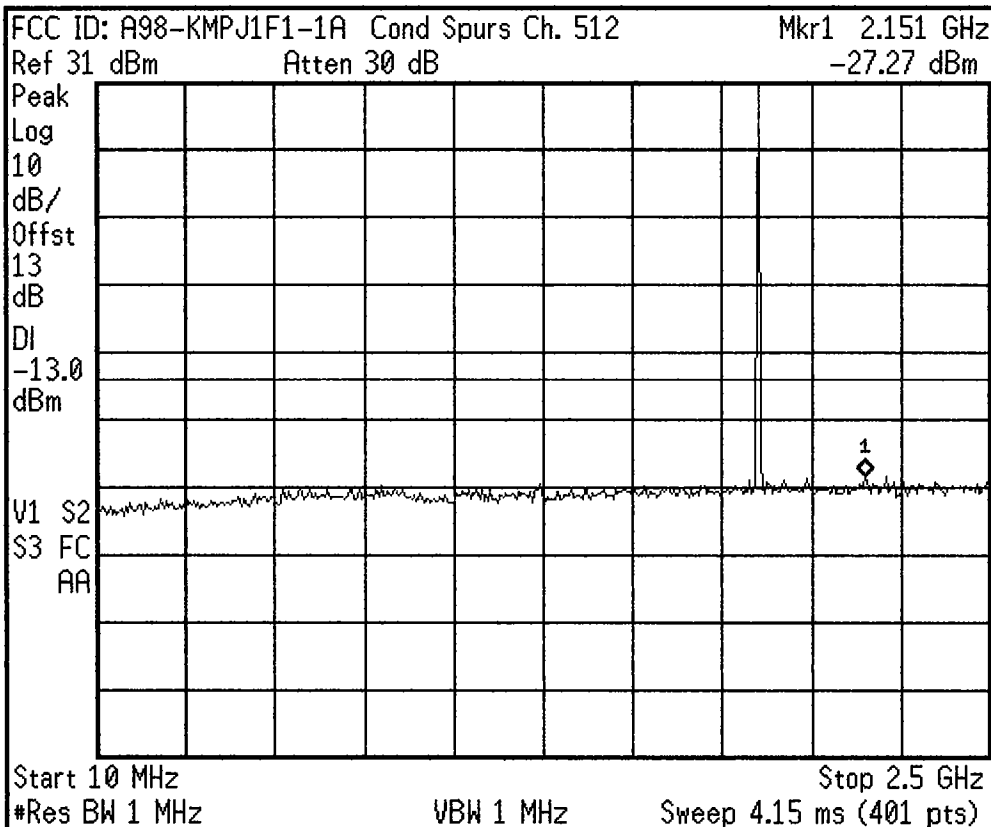
Off

Scale Type

Log

Lin

Agilent



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

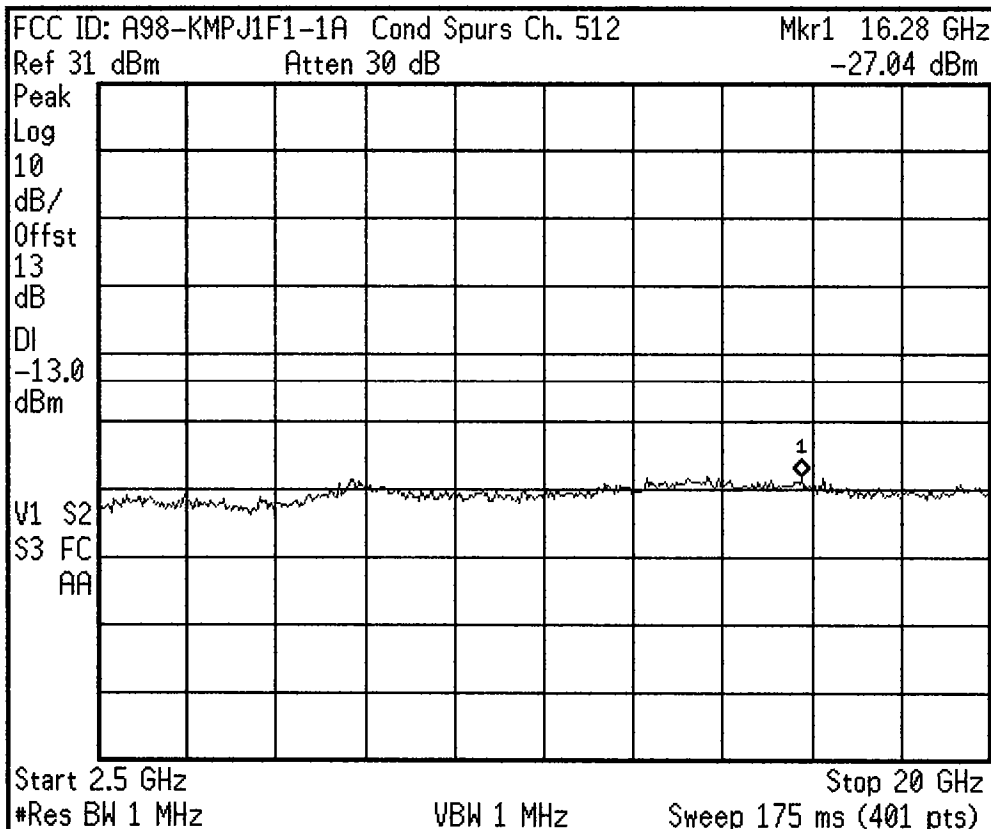
Signal Track

On Off

Scale Type

Log Lin

Agilent



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

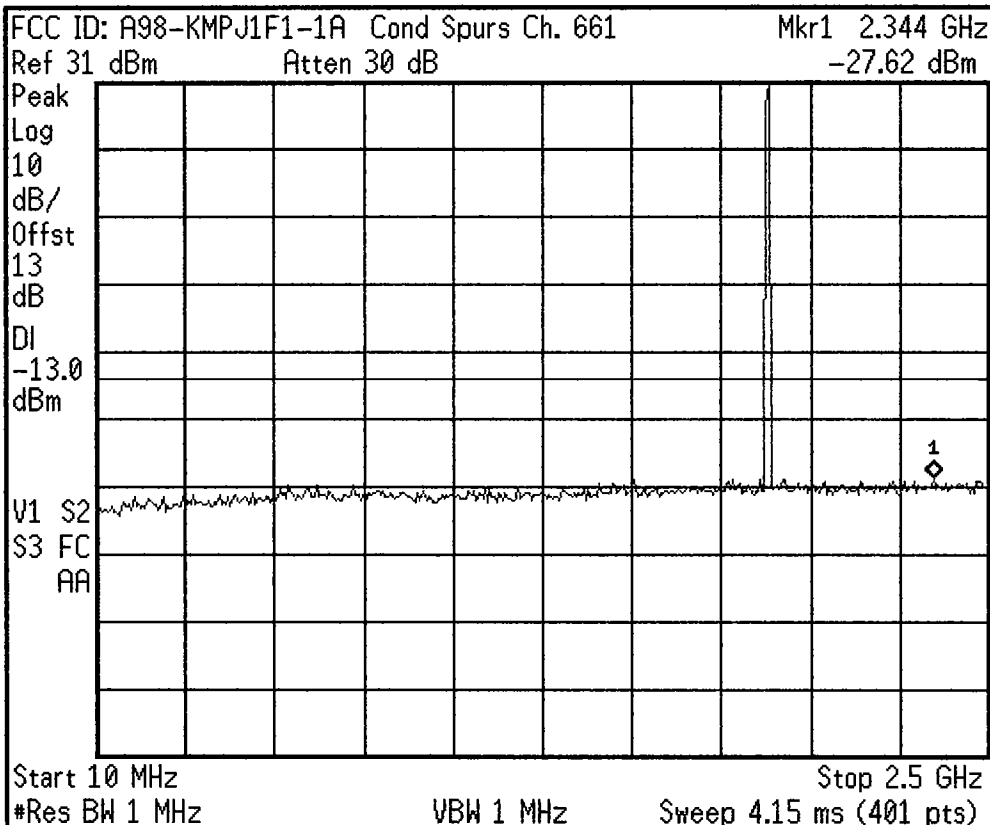
Signal Track

On Off

Scale Type

Log Lin

Agilent



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

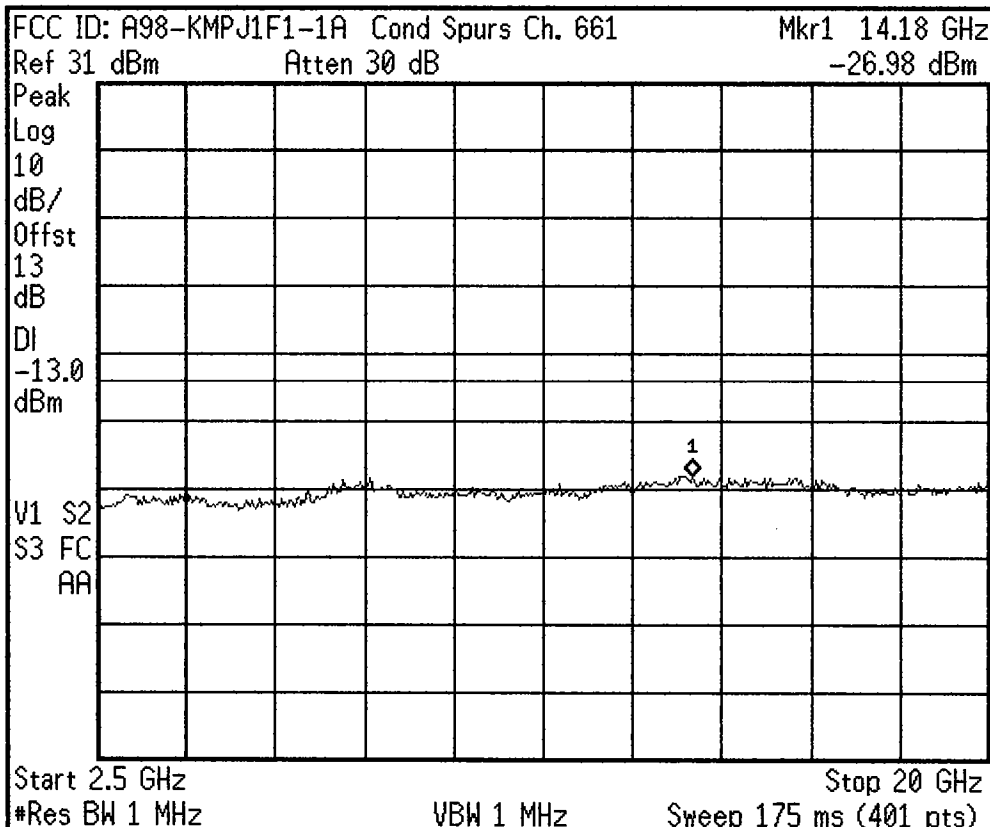
Signal Track

On Off

Scale Type

Log Lin

Agilent



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

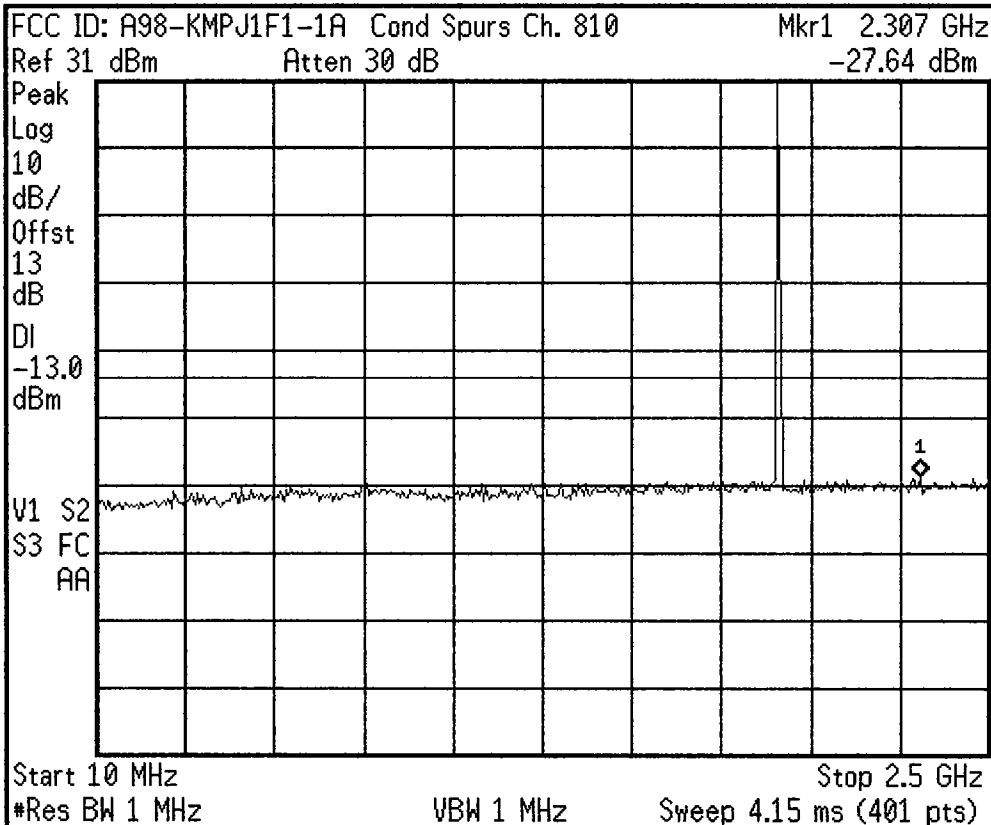
Signal Track

On Off

Scale Type

Log Lin

Agilent



Freq/Channel

Center Freq
1.25500000 GHz

Start Freq
10.0000000 MHz

Stop Freq
2.50000000 GHz

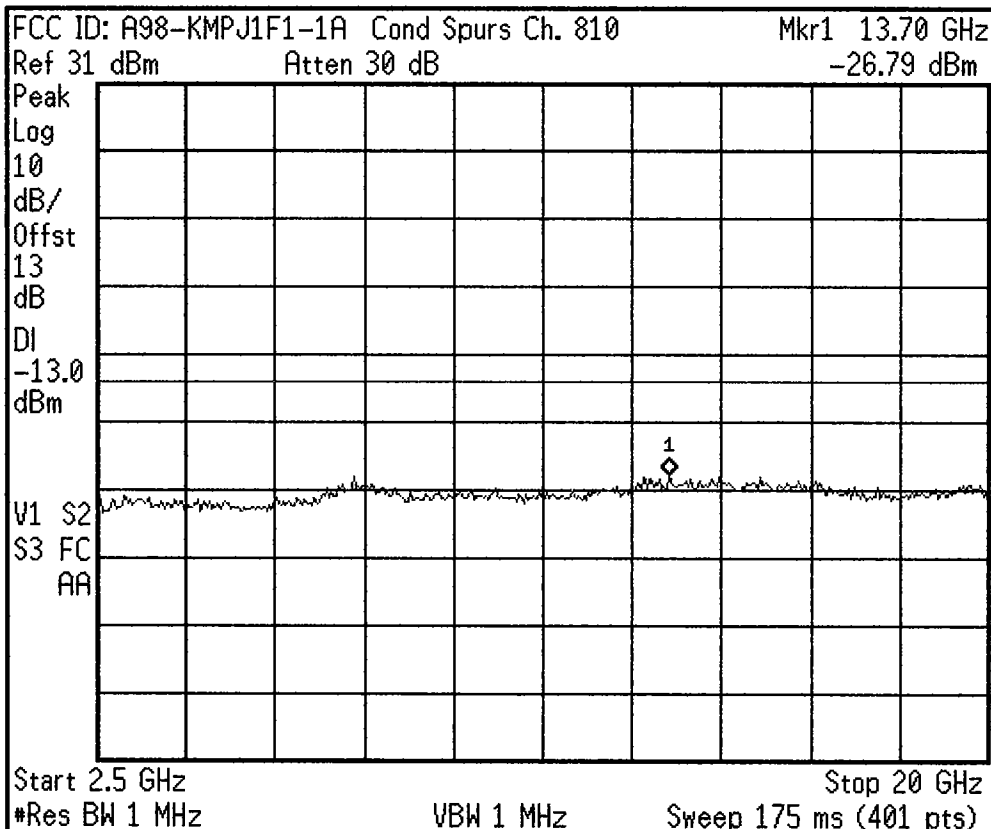
CF Step
249.000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

Scale Type
Log Lin

Agilent



Freq/Channel

Center Freq
11.25000000 GHz

Start Freq
2.50000000 GHz

Stop Freq
20.00000000 GHz

CF Step
1.75000000 GHz
Auto Man

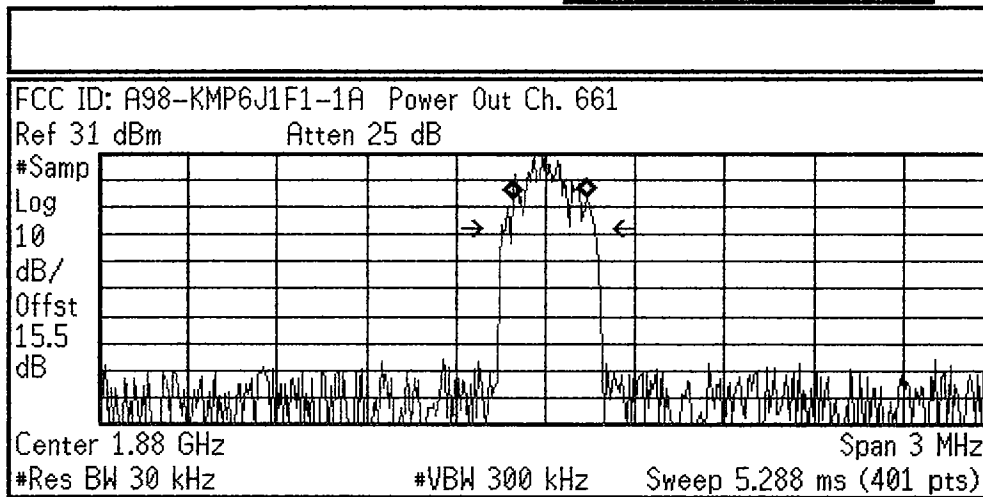
Freq Offset
0.00000000 Hz

Signal Track
On Off

Scale Type
Log Lin

✱ Agilent

Ch Freq 1.88 GHz		Trig Free
Occupied Bandwidth		

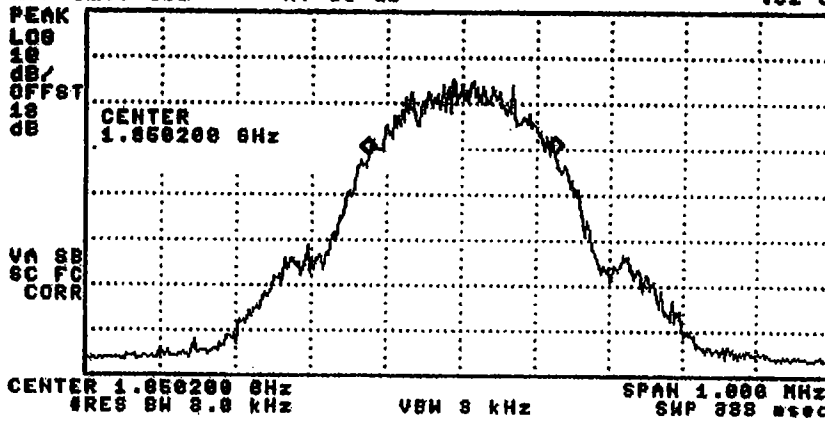


Occupied Bandwidth	Occ BW % Pwr	99.00 %
250.2067 kHz	x dB	-26.00 dB
Transmit Freq Error	11.202 kHz	
x dB Bandwidth	316.576 kHz*	

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
Scale Type Log Lin

FCC ID:A98-KMP6J1F1-1A OBWC-512 PCS
 REF 31.0 dBm AT 30 dB

.51 dB



START FREQ

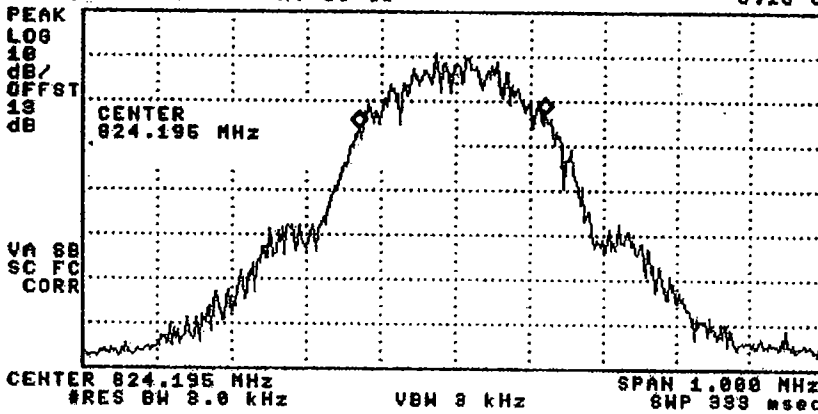
STOP FREQ

CF STEP AUTO MAN

FREQ OFFSET

FCC ID:A98-KMP6J1F1-1A OBWC-128 (850 BAND)
 REF 31.0 dBm AT 30 dB

3.13 dB



ENTER FREQ

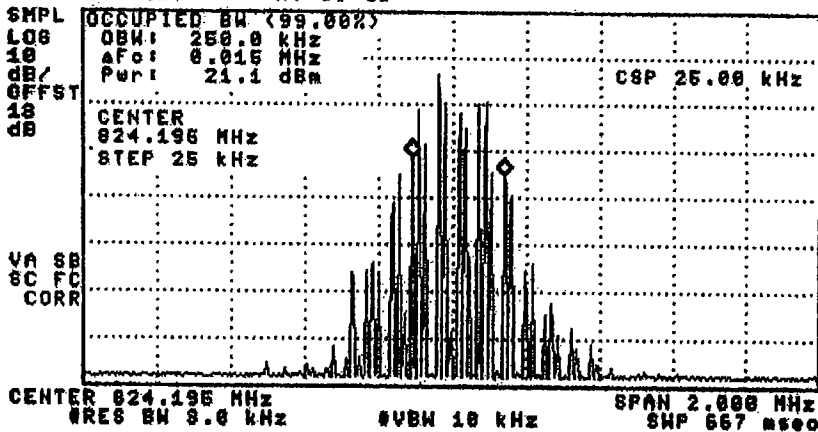
START FREQ

STOP FREQ

CF STEP AUTO MAN

FREQ OFFSET

FCC ID:A98-KMP6J1F1-1A OBWC-128 (850 BAND)
 REF 31.0 dBm AT 30 dB



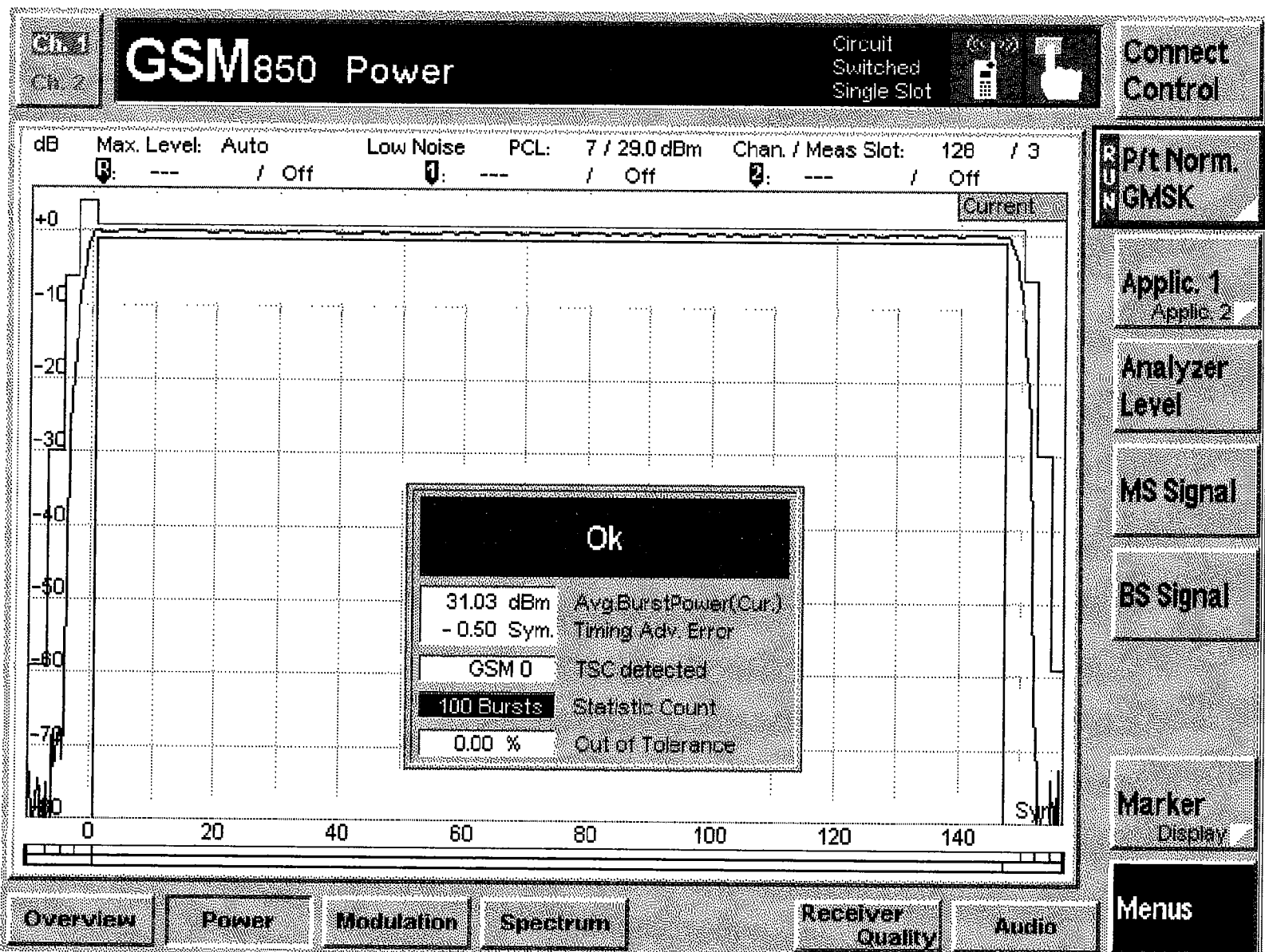
ENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

FREQ OFFSET



Ch. 1
Ch. 2

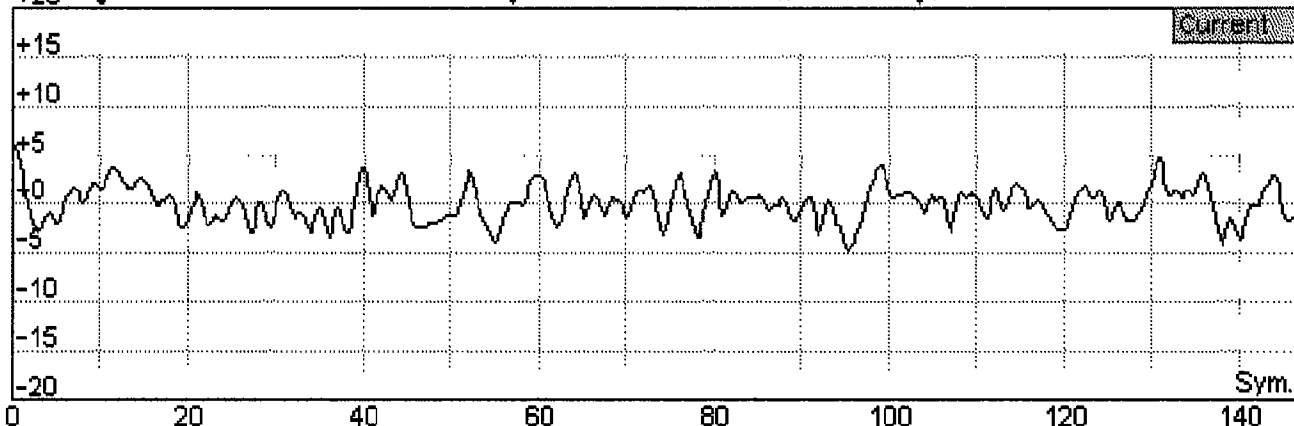
GSM850 Modulation

Circuit
Switched
Single Slot



Connect
Control

Max. Level: Auto Low Noise PCL: 7 / 29.0 dBm Chan. / Meas Slot: 128 / 3
B: --- / Off 0: --- / Off 2: --- Off



GSM 0 TSC detected

	Current	Average	Max / Min
Phase Error	5.9 °	5.9 °	7.9 °
	1.8 °	1.8 °	2.2 °
Origin Offset	-37.5 dB	-37.3 dB	-33.8 dB
I/Q Imbalance	-54.7 dB	-50.9 dB	-41.2 dB
Frequency Error	-14 Hz	-4 Hz	26 Hz

-0.50 Sym.

Timing Advance Error

31.0 dBm

Avg. Burst Power (Cur.)

100 Bursts

Statistic Count

0.00 %

Bursts out of Tolerance

Ext. Phase
Err. GMSK

Appli-
cation

Analyzer
Level

MS Signal

BS Signal

Marker

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

Audio



Ch. 2

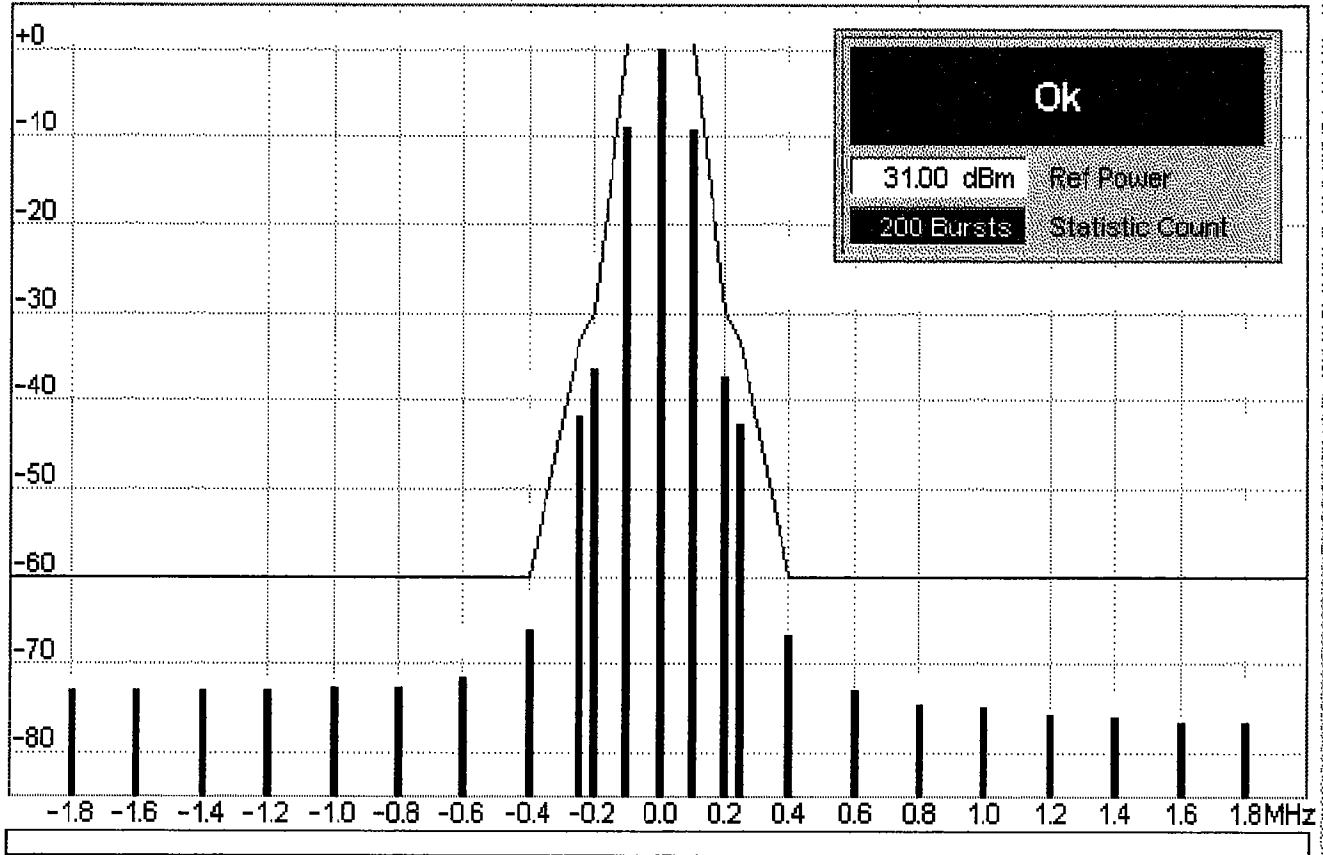
GSM850 Spectrum

Circuit
Switched
Single Slot



Connect
Control

dBc Max. Level: Auto Low Noise PCL: 7 / 29.0 dBm Chan. / Meas Slot: 128 / 3
Q: --- / Off Q: --- / Off Q: --- / Off



Modulation
GMSK

Appli-
cation

Analyzer
Level

MS Signal

BS Signal

Marker

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

Audio

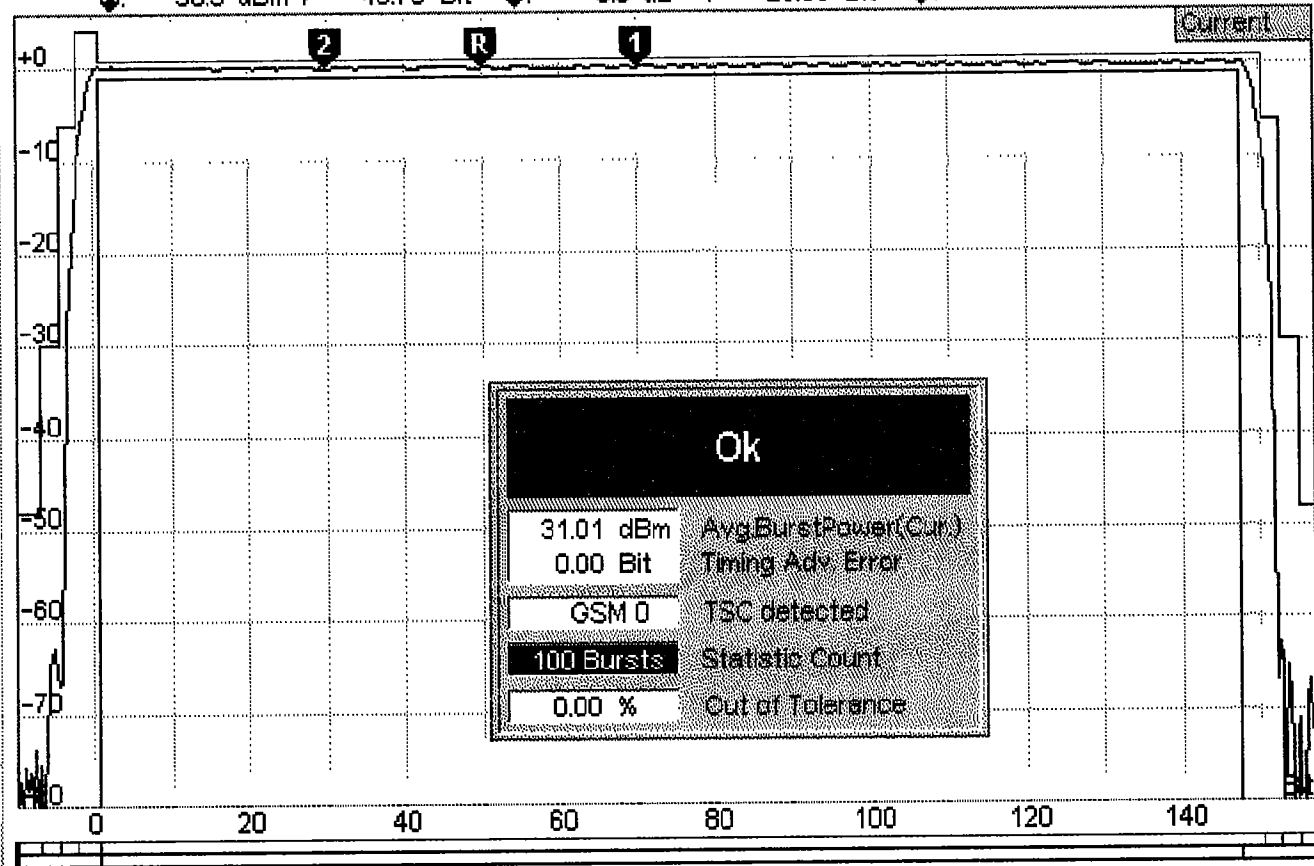
Group
Config

GSM 1900 Power



Connect.
Control

dB Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 661 / 1860.0 MHz
B: 30.9 dBm / 49.75 Bit U: 0.0 dB / + 20.00 Bit Z: 0.0 dB / - 20.00 Bit



RUN P/t Norm.
GMSK

Appli-
cation

Analyzer
Level

MS Signal

BS Signal

Marker
Display

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

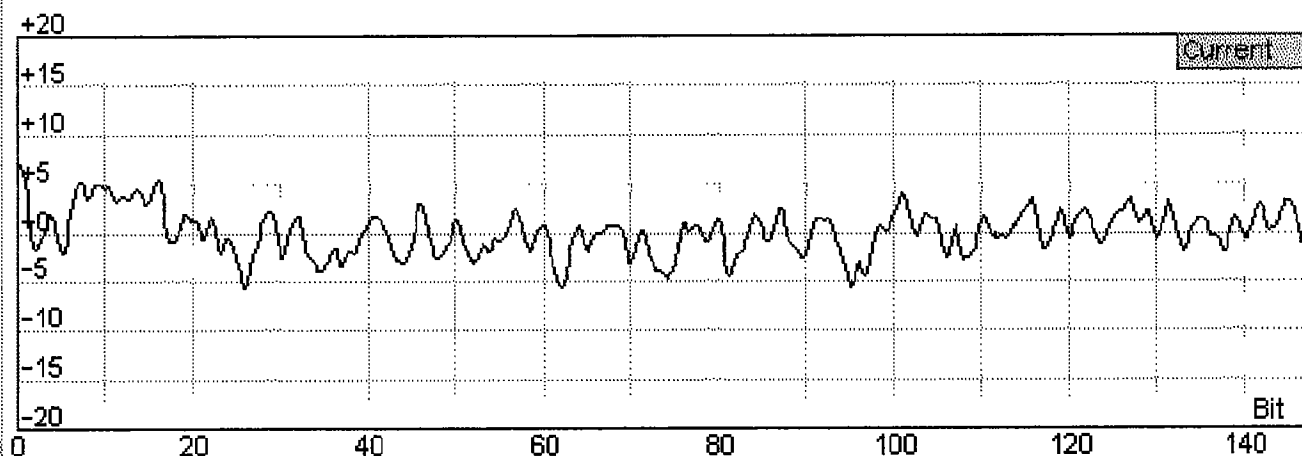
Group
Config.

GSM 1900 Modulation



Connect.
Control

Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 661 / 1860.0 MHz



Ext. Phase
Err. GMSK

Analyzer
Level

MS Signal

BS Signal

GSM 0 TSC detected

0.0 Bit

	Current	Average	Max / Min
Phase Error	6.8 °	8.2 °	13.5 °
	2.3 °	2.3 °	2.9 °
Origin Offset	-43.4 dB	-43.3 dB	-34.9 dB
I/Q Imbalance	-60.4 dB	-49.4 dB	-38.4 dB
Frequency Error	6 Hz	-15 Hz	-61 Hz

Timing Advance Error

31.0 dBm

Avg. Burst Power (Cur.)

100 Bursts

Statistic Count

0.00 %

Bursts out of Tolerance

Overview

Power

Modulation

Spectrum

Receiver
Quality

Menus

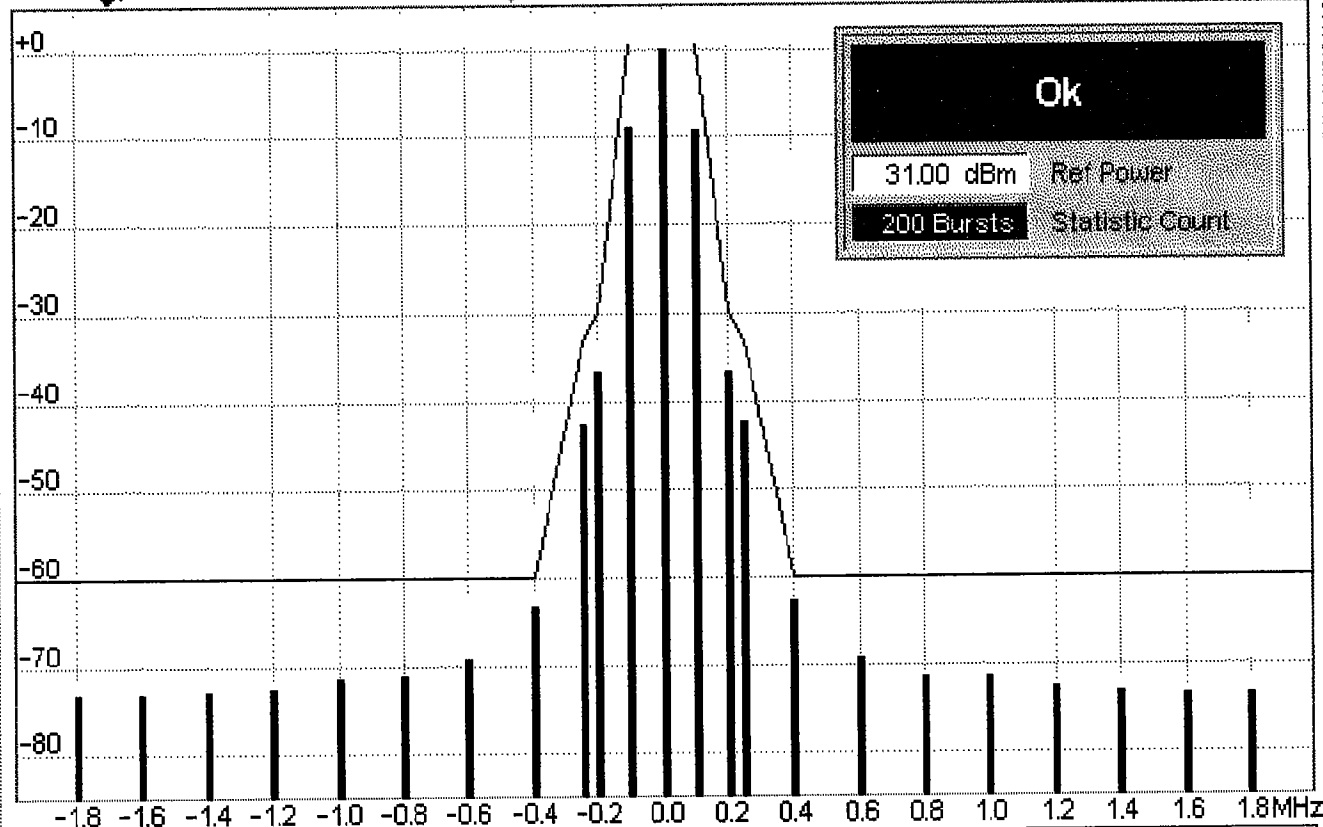
Group
Config

GSM 1900 Spectrum



Connect.
Control

dBc Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 661 / 1880.0 MHz
B: --- / Off U: --- / Off Z: --- / Off



Modulation
GMSK

Appli-
cation

Analyzer
Level

MS Signal

BS Signal

Marker

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality