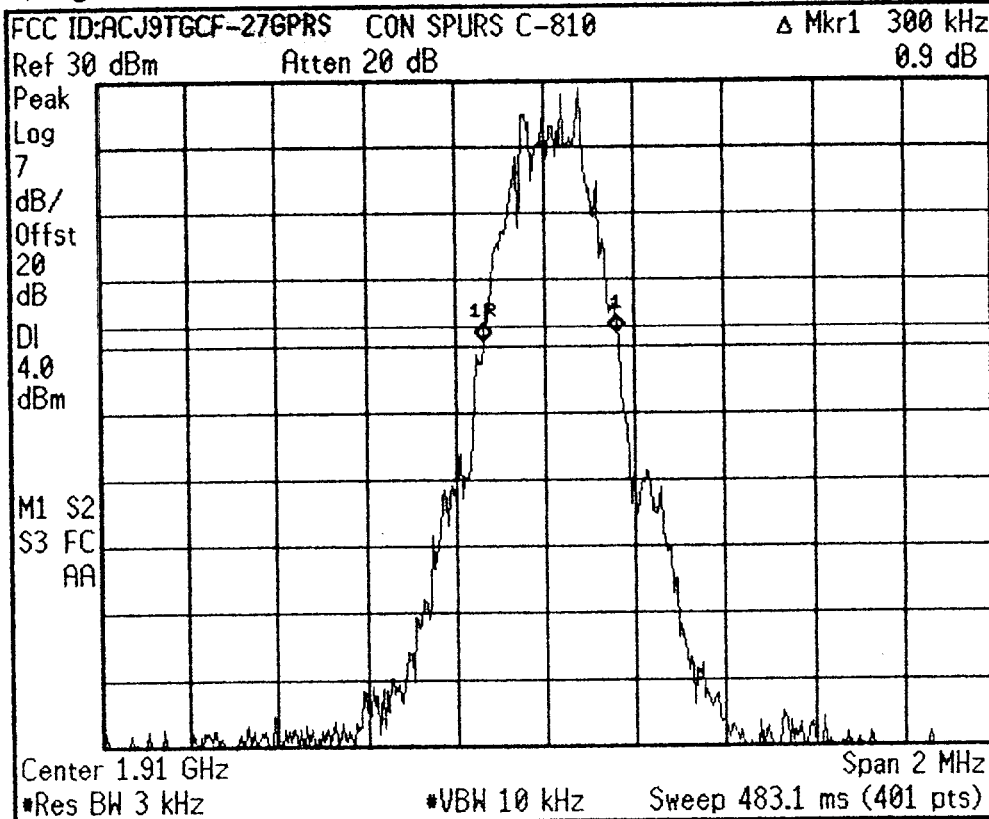


ATTACHMENT B – TEST PLOTS)

Agilent 12:40:23 Jul 25, 2001



Freq/Channel

Center Freq
 1.90980000 GHz

Start Freq
 1.90880000 GHz

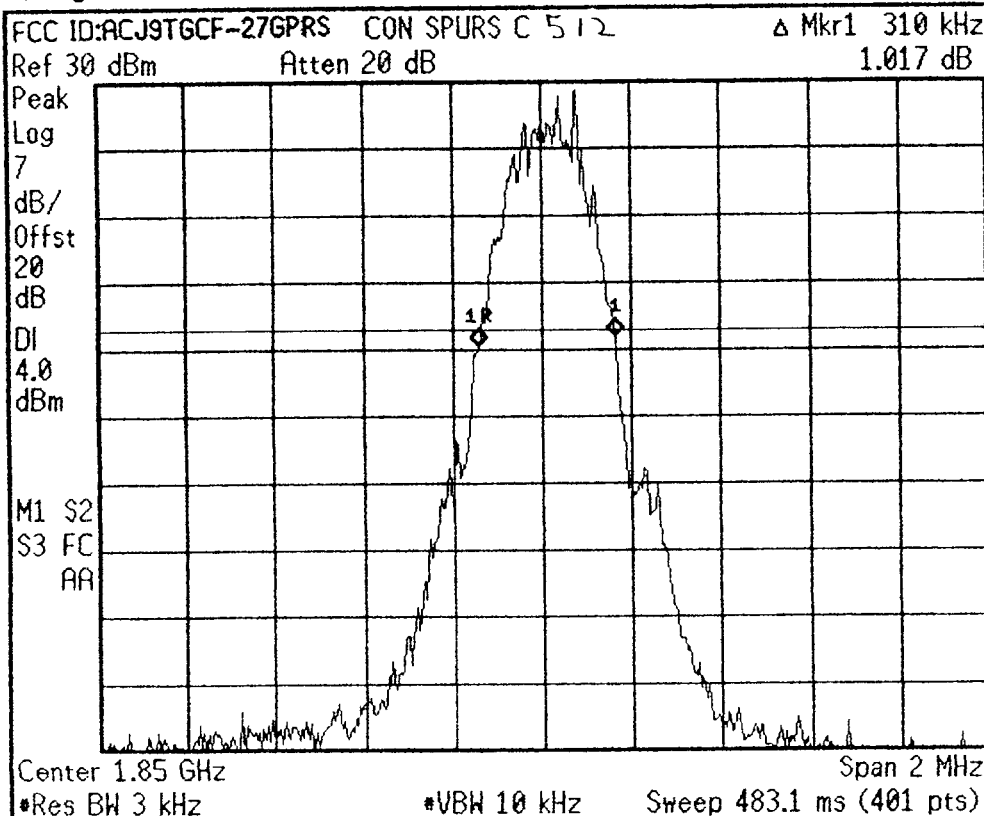
Stop Freq
 1.91080000 GHz

CF Step
 200.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

Agilent 12:43:23 Jul 25, 2001



Freq/Channel

Center Freq
 1.85020000 GHz

Start Freq
 1.84920000 GHz

Stop Freq
 1.85120000 GHz

CF Step
 200.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

Agilent 12:24:45 Jul 25, 2001

FCC ID:ACJ9TGCF-27GPRS CON SPURS C-512

Ref 30 dBm

Atten 25 dB

Peak

Log

7

dB/

Offst

16

dB

DI

-13.0

dBm

M1 S2

S3 FC

AA

Start 10 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms (401 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 12:25:51 Jul 25, 2001

FCC ID:ACJ9TGCF-27GPRS CON SPURS C-512

Mkr1 13.70 GHz

Ref 30 dBm

Atten 25 dB

-28.03 dBm

Peak

Log

7

dB/

Offst

16

dB

DI

-13.0

dBm

V1 S2

S3 FC

AA

Start 2.5 GHz

*Res BW 1 MHz

VBW 1 MHz

Stop 20 GHz

Sweep 175 ms (401 pts)

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

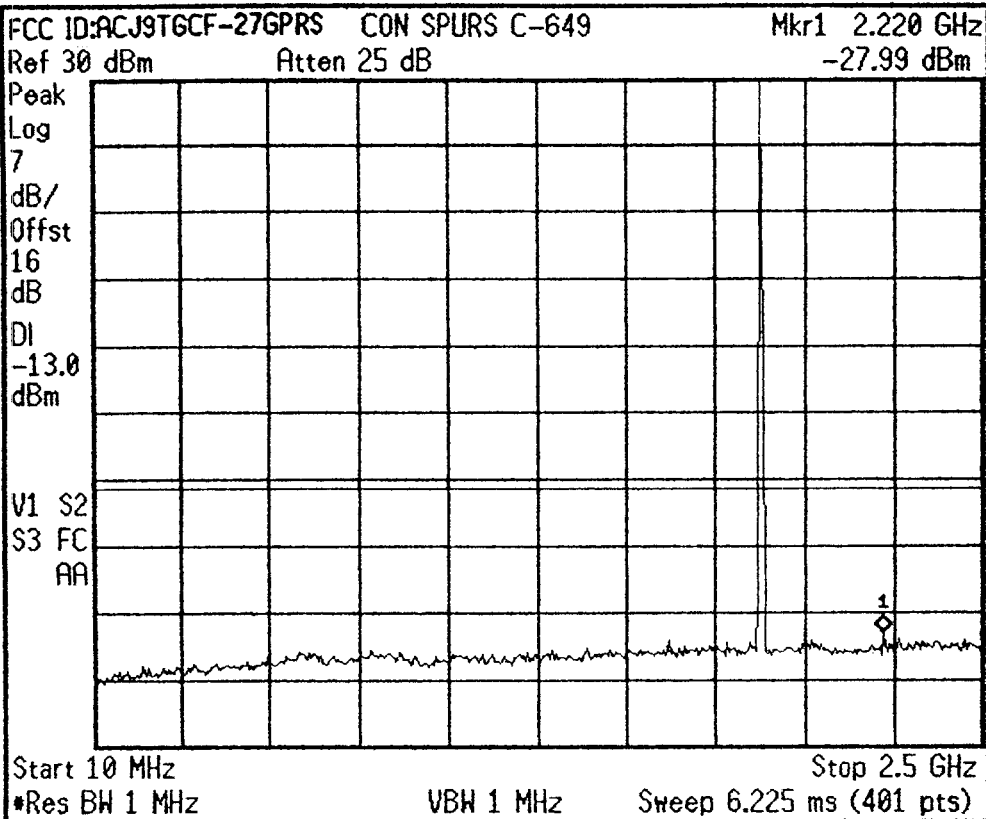
0.00000000 Hz

Signal Track

On

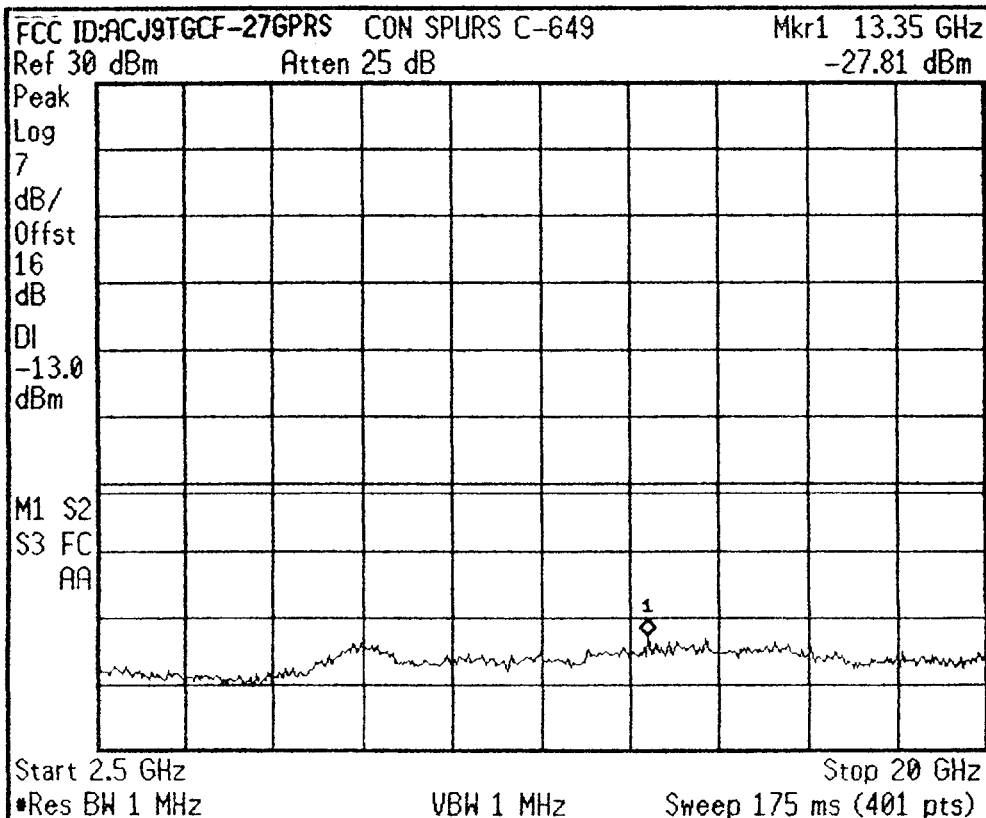
Off

Agilent 12:27:57 Jul 25, 2001



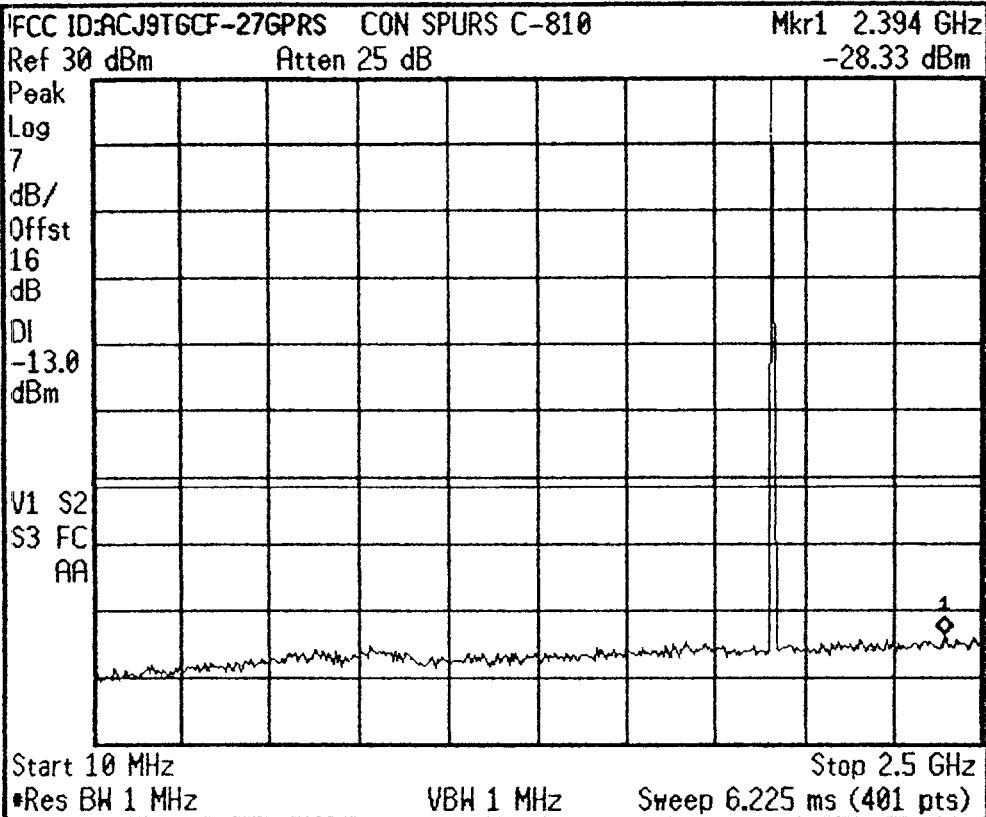
Freq/Channel
Center Freq 1.25500000 GHz
Start Freq 10.0000000 MHz
Stop Freq 2.50000000 GHz
CF Step 249.000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

Agilent 12:29:03 Jul 25, 2001



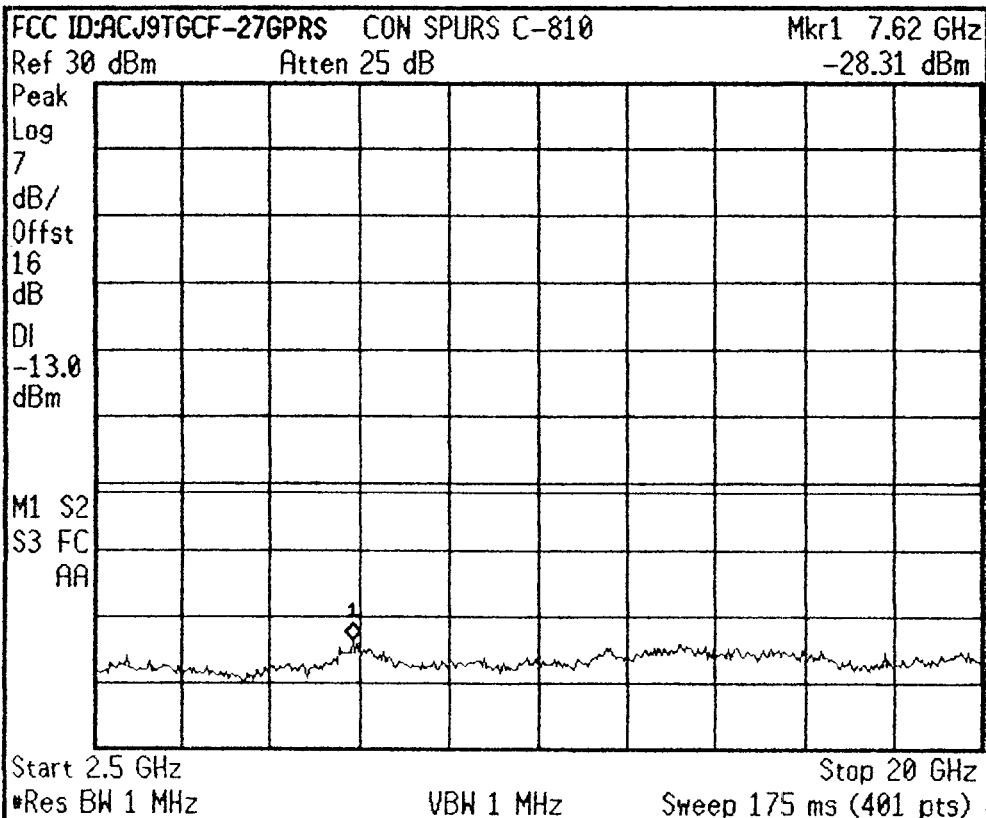
Freq/Channel
Center Freq 11.2500000 GHz
Start Freq 2.50000000 GHz
Stop Freq 20.0000000 GHz
CF Step 1.75000000 GHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

* Agilent 12:31:08 Jul 25, 2001



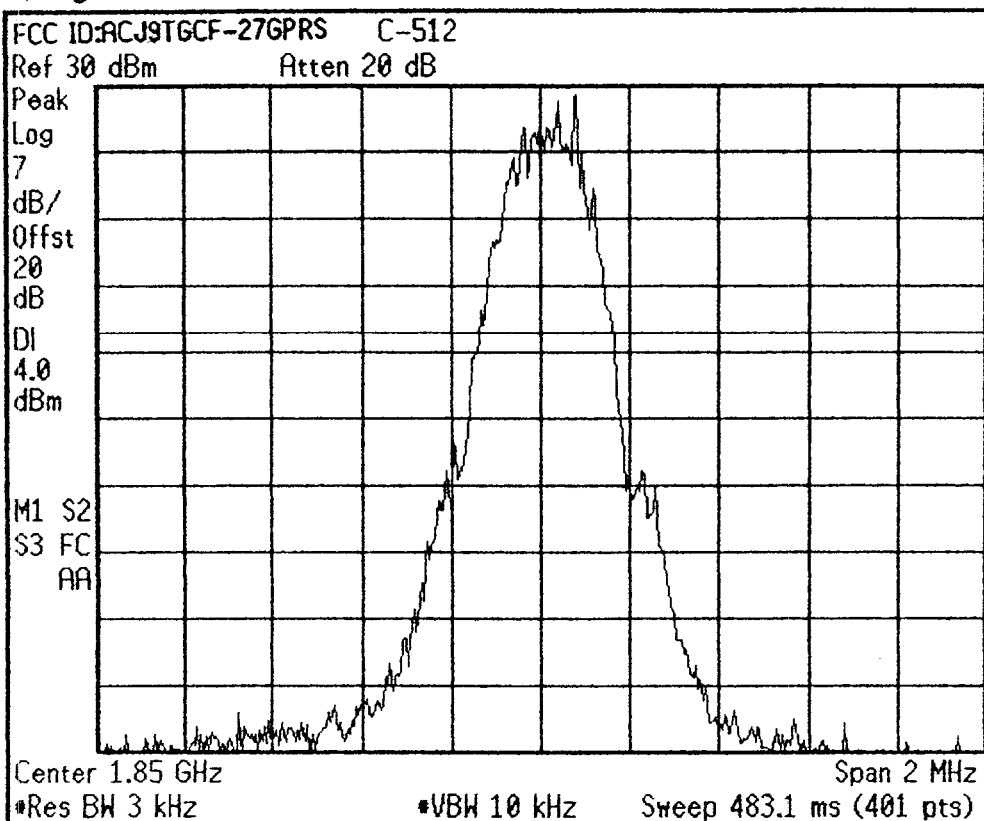
Freq/Channel
Center Freq 1.25500000 GHz
Start Freq 10.0000000 MHz
Stop Freq 2.50000000 GHz
CF Step 249.000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

* Agilent 12:32:05 Jul 25, 2001



Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More 1 of 2

Agilent 12:45:57 Jul 25, 2001



Freq/Channel

Center Freq
 1.85020000 GHz

Start Freq
 1.84920000 GHz

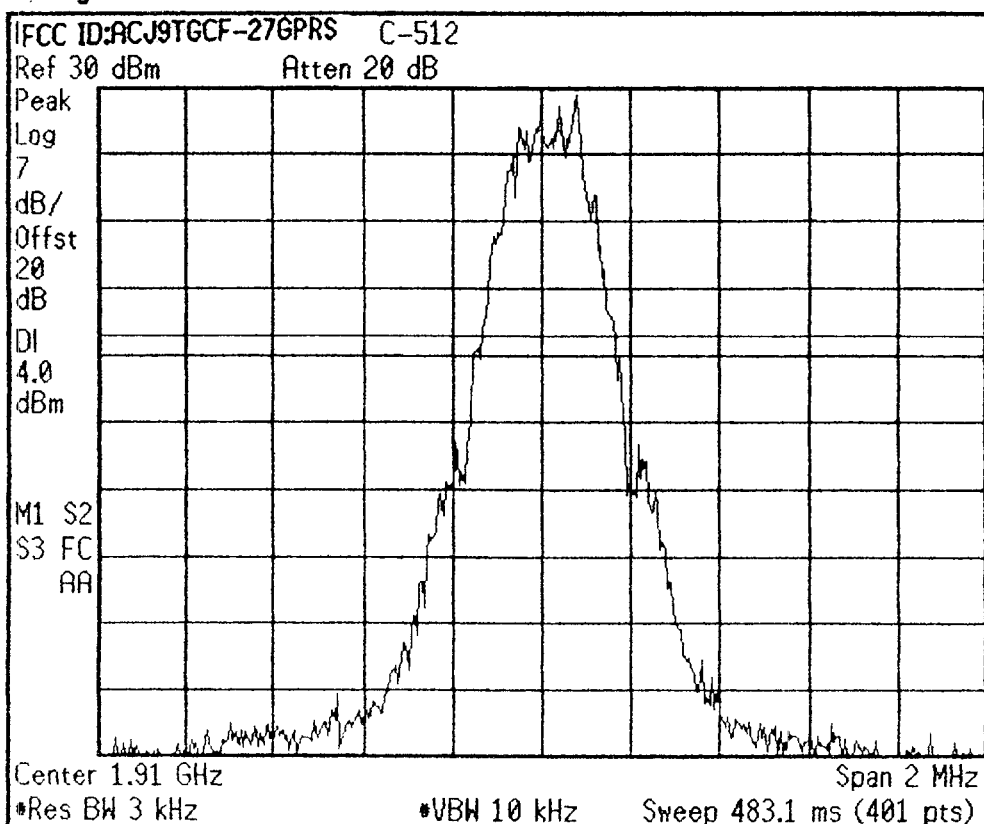
Stop Freq
 1.85120000 GHz

CF Step
 200.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off

Agilent 12:47:25 Jul 25, 2001



Freq/Channel

Center Freq
 1.90980000 GHz

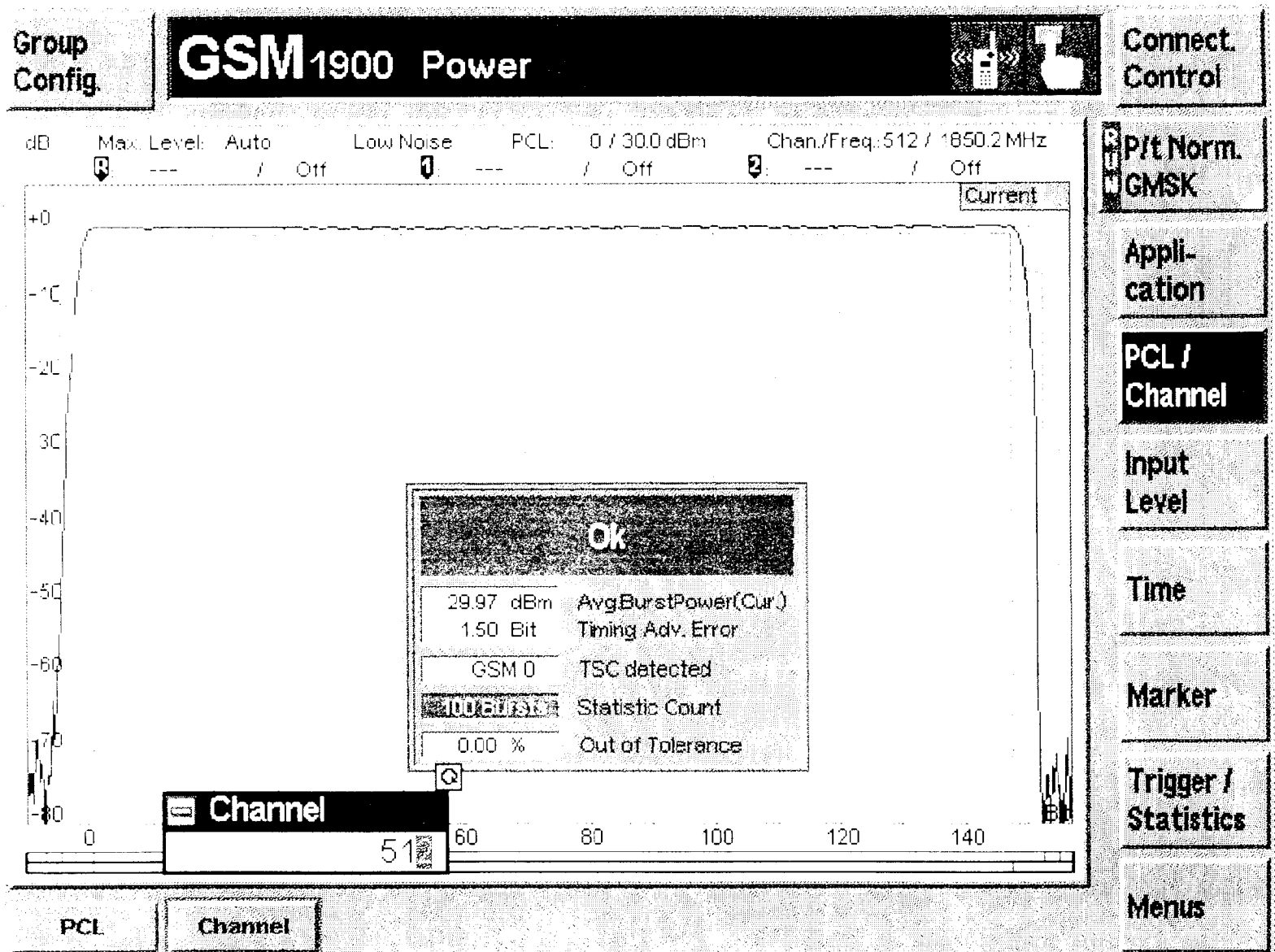
Start Freq
 1.90880000 GHz

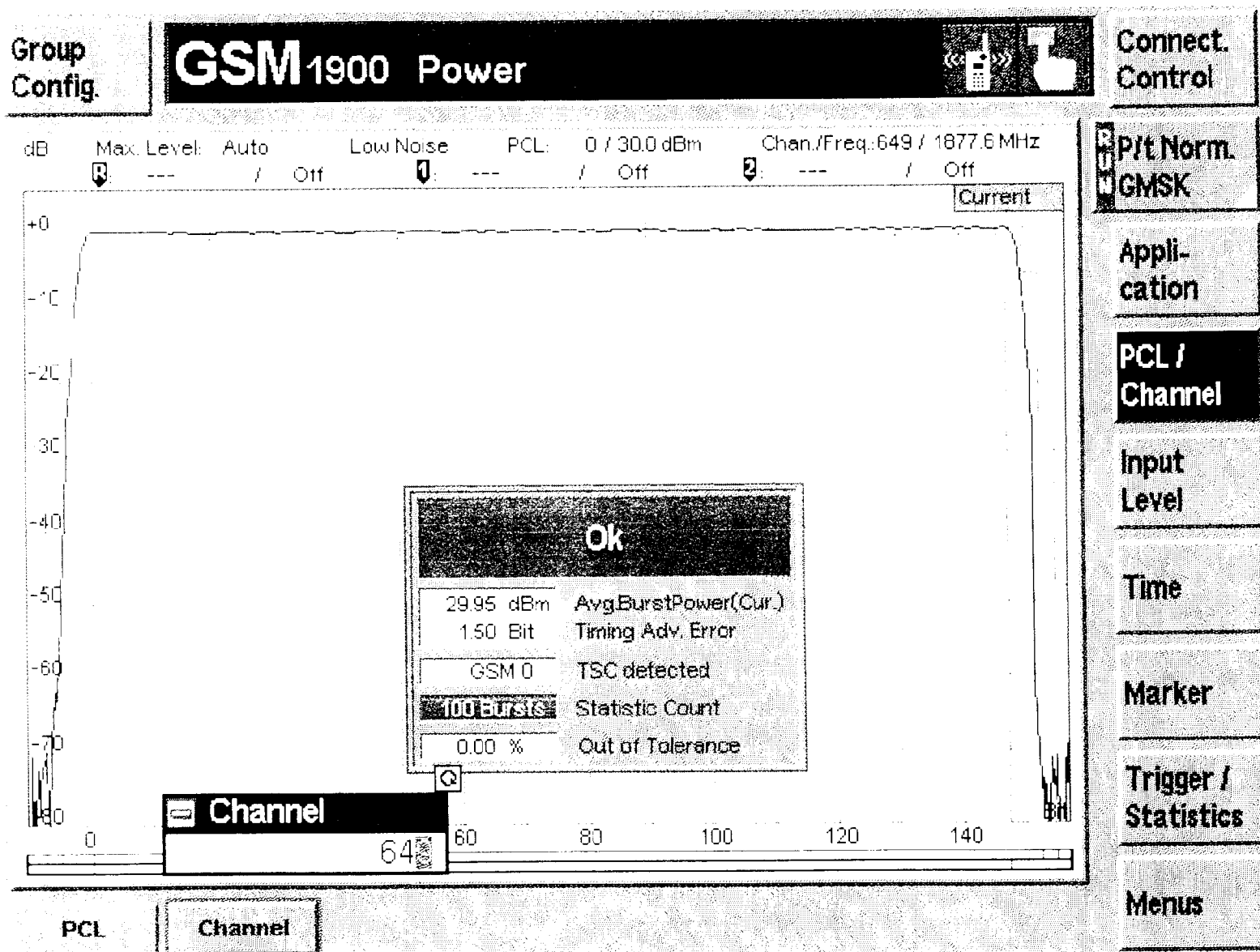
Stop Freq
 1.91080000 GHz

CF Step
 200.000000 kHz
 Auto Man

Freq Offset
 0.00000000 Hz

Signal Track
 On Off





Group
Config

GSM1900 Power



Connect.
Control

dB Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 810 / 1909.8 MHz
--- / Off --- / Off --- / Off

P/t Norm.
GMSK

Appli-
cation

PCL /
Channel

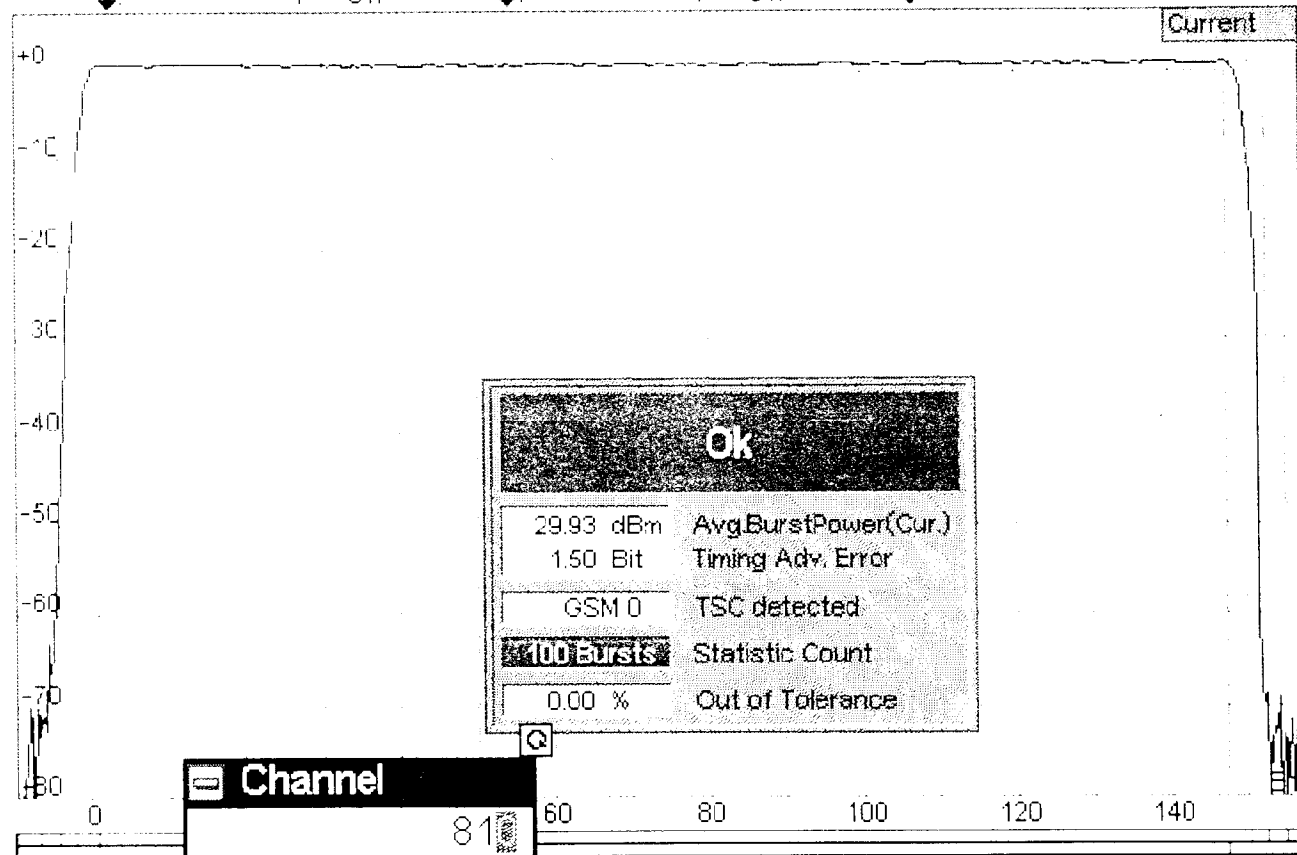
Input
Level

Time

Marker

Trigger /
Statistics

Menus



PCL

Channel

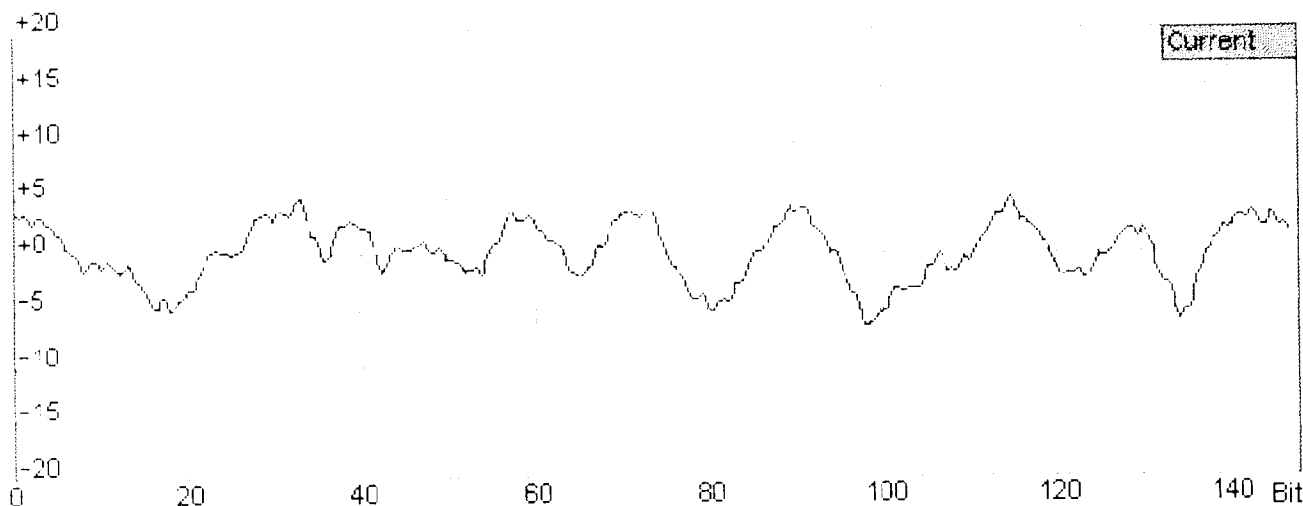
Group
Config

GSM1900 Modulation



Connect.
Control

Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 512 / 1850.2 MHz



	Current	Average	Max / Min
Phase Error (Peak)	-6.7 °	5.8 °	10.6 °
Phase Error (RMS)	2.7 °	2.2 °	3.1 °
Frequency Error	-4 Hz	-33 Hz	-68 Hz

29.8 dBm
Avg. Burst Power

100 Bursts
Statistic Count

0.00 %
Bursts out of Tolerance

Phase /
Freq. Err

PCL /
Channel

Input
Level

Time

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

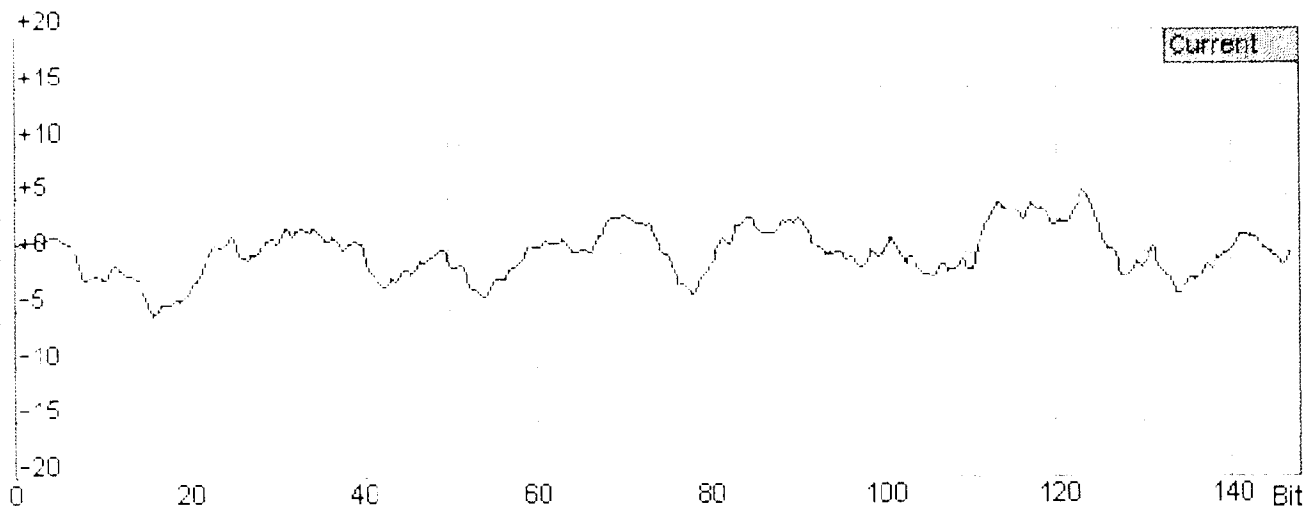
Group
Config

GSM 1900 Modulation



Connect.
Control

Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 649 / 1877.6 MHz



Phase /
Freq. Err

PCL /
Channel

Input
Level

Time

	Current	Average	Max / Min
Phase Error (Peak)	-5.7 °	5.6 °	7.6 °
Phase Error (RMS)	2.1 °	2.1 °	2.7 °
Frequency Error	6 Hz	-22 Hz	-49 Hz

30.1 dBm

Avg. Burst Power

100

Bursts

Statistic Count

0.00 %

Bursts out of Tolerance

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

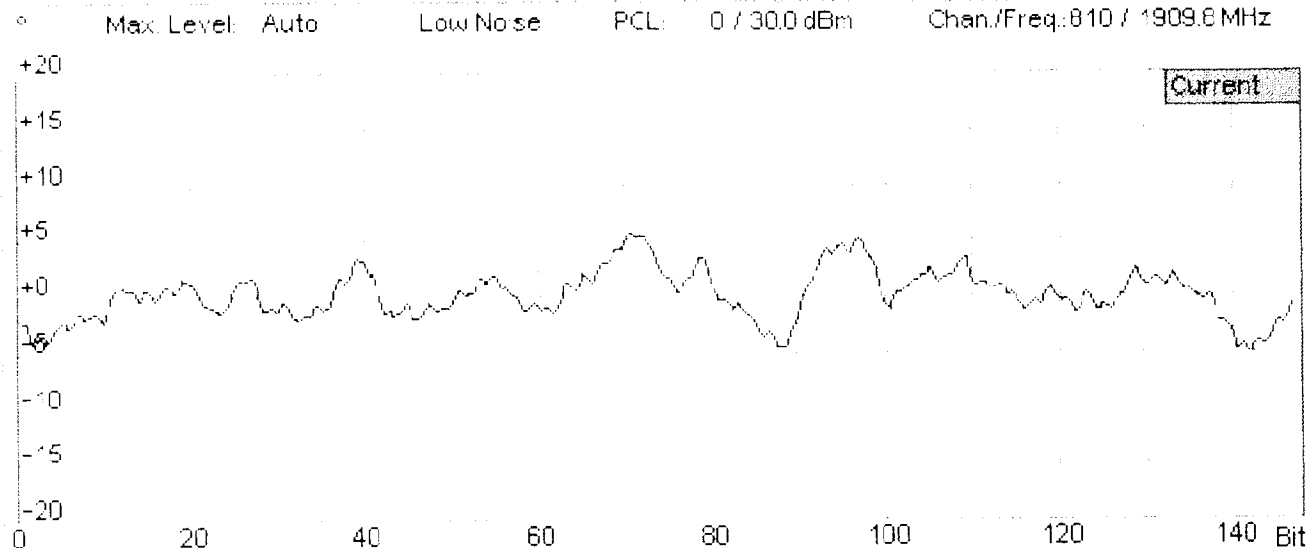
Receiver
Quality

Group
Config

GSM1900 Modulation



Connect.
Control



Phase /
Freq. Err

PCL /
Channel

Input
Level

Time

	Current	Average	Max / Min
Phase Error (Peak)	5.5 °	6.1 °	8.9 °
Phase Error (RMS)	2.2 °	2.2 °	2.9 °
Frequency Error	- 43 Hz	- 24 Hz	- 46 Hz

30.1 dBm
Avg. Burst Power

100 Bursts
Statistic Count

0.00 %
Bursts out of Tolerance

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

Group Config		GSM 1900 Overview		 		Connect. Control	
Power	0 (30.0 dBm)	Reported Power	IMSI 234.151.701769590 IMEI 012345.67.390123.4 Power Class 1 (max. 30 dBm) MS Rev. Level Phase II Dialled Number - Traffic Mode Full Rate Version 1		Signalling Info		
	30.1 dBm	Average Burst Power (Current)					
	30.2 dBm	Peak Burst Power (Current)					
	OK	Power Ramp					
	1.5 Bit	Timing Error					
Phase Freq. (Err.)	- 59 Hz	Frequency Error	0	PCL	3	Timeslot	PCL/ Timeslot
	- 5.2 °	Phase Error (Peak)	649	Traffic Channel	off	Hopping (Seq.)	TCH/ Hopping
	2.3 °	Phase Error (RMS)					
MS Rcv. Reports	21 (- 90 to - 89 dBm)	RX Level	- 90.0 dBm	used	- 20.0 dB	unused	TCH Level
	0 (0.0 to 0.2 %)	RX Quality					
	On	Discont. Transmission (DTX)	Echo 				Bit Stream
Overview		Power	Modulation	Spectrum	Receiver Quality		

Group
Config.

GSM1900 Overview



Connect.
Control

Power

0(30.0 dBm)

Reported Power

29.8 dBm

Average Burst
Power (Current)

30.0 dBm

Peak Burst
Power (Current)

Ok

Power Ramp

1.5 Bit

Timing Error

IMSI

234.151.701769590

IMEI

012345.67.890123.4

Power Class

1 (max 30 dBm)

MS Rev. Level

Phase II

Dialled Number

-

Traffic Mode

Full Rate Version 1

Signalling
Info

Phase
Freq. (Err.)

- 38 Hz

Frequency Error

5.7 °

Phase Error (Peak)

2.1 °

Phase Error (RMS)

0

PCL

3

Timeslot

PCL/
Timeslot

512

Traffic
Channel

off

Hopping
(Seq.)

TCH/
Hopping

MS Rcv.
Reports

20 (- 91 to - 90 dBm)

RX Level

6 (6.4 to 12.8 %)

RX Quality

On

Discont. Transmission (DTX)

- 90.0 dBm

used

- 20.0 dB

unused

TCH
Level

Echo



Bit
Stream

Overview

Power

Modulation

Spectrum

Receiver
Quality

Group
Config

GSM 1900 Overview



Connect.
Control

Power

RUN

0(30.0 dBm)

Reported Power

30.1 dBm

Average Burst
Power (Current)

30.3 dBm

Peak Burst
Power (Current)

Ok

Power Ramp

1.5 Bit

Timing Error

MSI 234.151.701769590
IMEI 012345.67.890123.4
Power Class 1 (max. 30 dBm)
MS Rev. Level Phase II
Dialled Number -
Traffic Mode Full Rate Version 1

Signalling
Info

Phase
Freq. (Err.)

RUN

- 34 Hz

Frequency Error

5.9 °

Phase Error (Peak)

2.3 °

Phase Error (RMS)

0

PCL

3

Timeslot

PCL/
Timeslot

810

Traffic
Channel

off

Hopping
(Seq.)

TCH/
Hopping

MS Rcv.
Reports

21 (- 90 to - 89 dBm)

RX Level

0 (0.0 to 0.2 %)

RX Quality

On

Discont. Transmission (DTX)

- 90.0 dBm

used

- 20.0 dB

unused

TCH
Level

Echo



Bit
Stream

Overview

Power

Modulation

Spectrum

Receiver
Quality

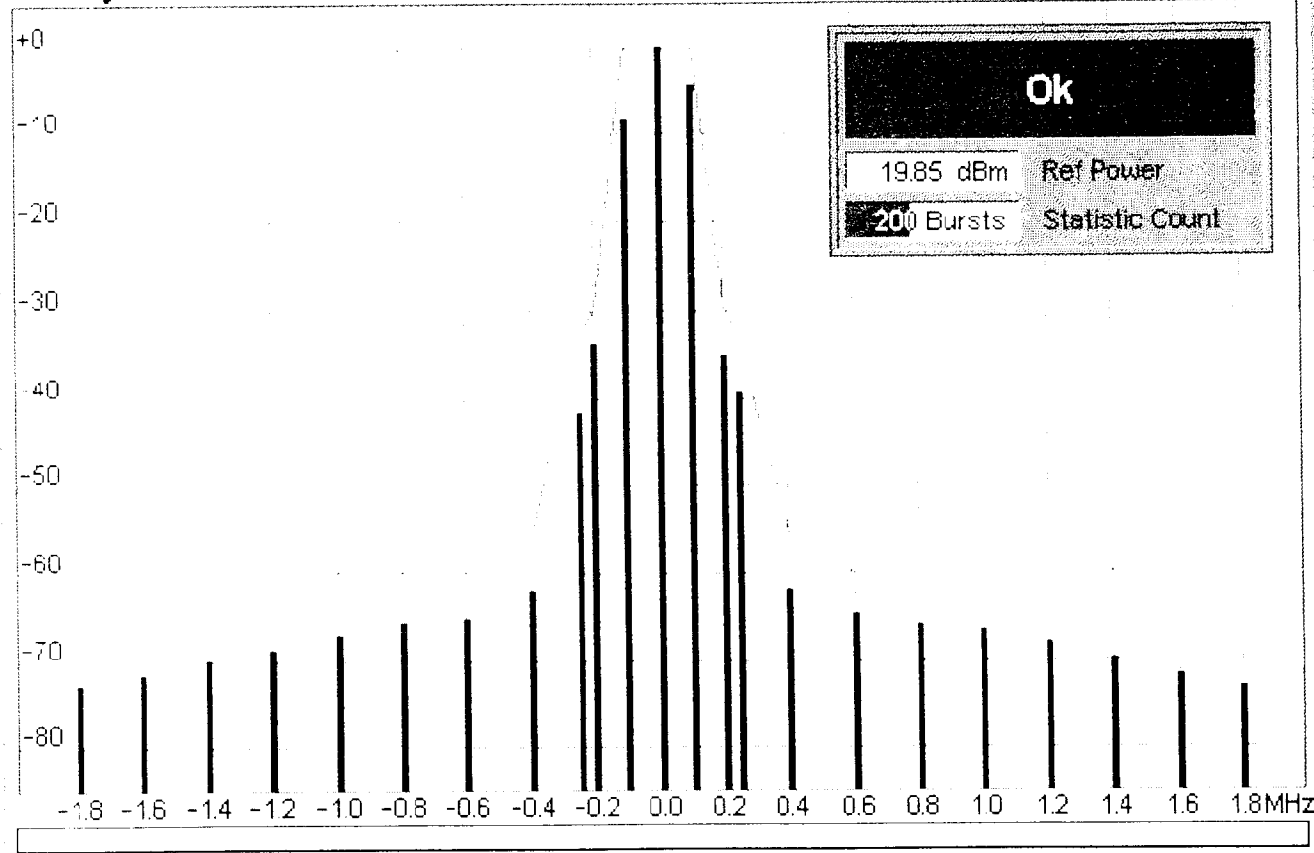
Group
Config.

GSM 1900 Spectrum



Connect.
Control

dBc Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 512 / 1850.2 MHz
R: --- / Off 0: --- / Off 2: --- / Off



due to
Mod.

Appli-
cation

PCL /
Channel

Input
Level

Marker

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

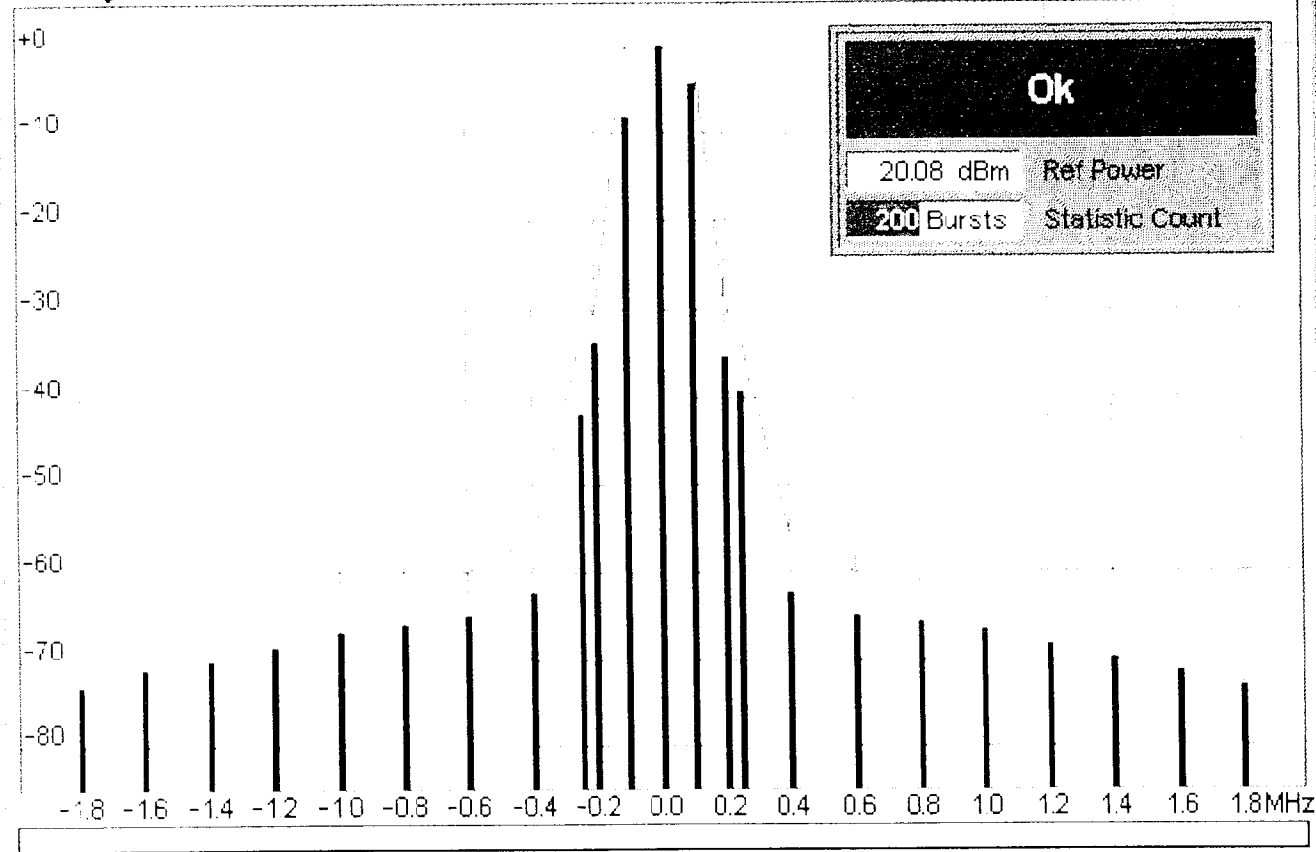
Group
Config.

GSM 1900 Spectrum



Connect.
Control

dBc Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 649 / 1877.6 MHz
R --- / Off 0 --- / Off 2: --- / Off



due to
Mod.

Appli-
cation

PCL /
Channel

Input
Level

Marker

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality

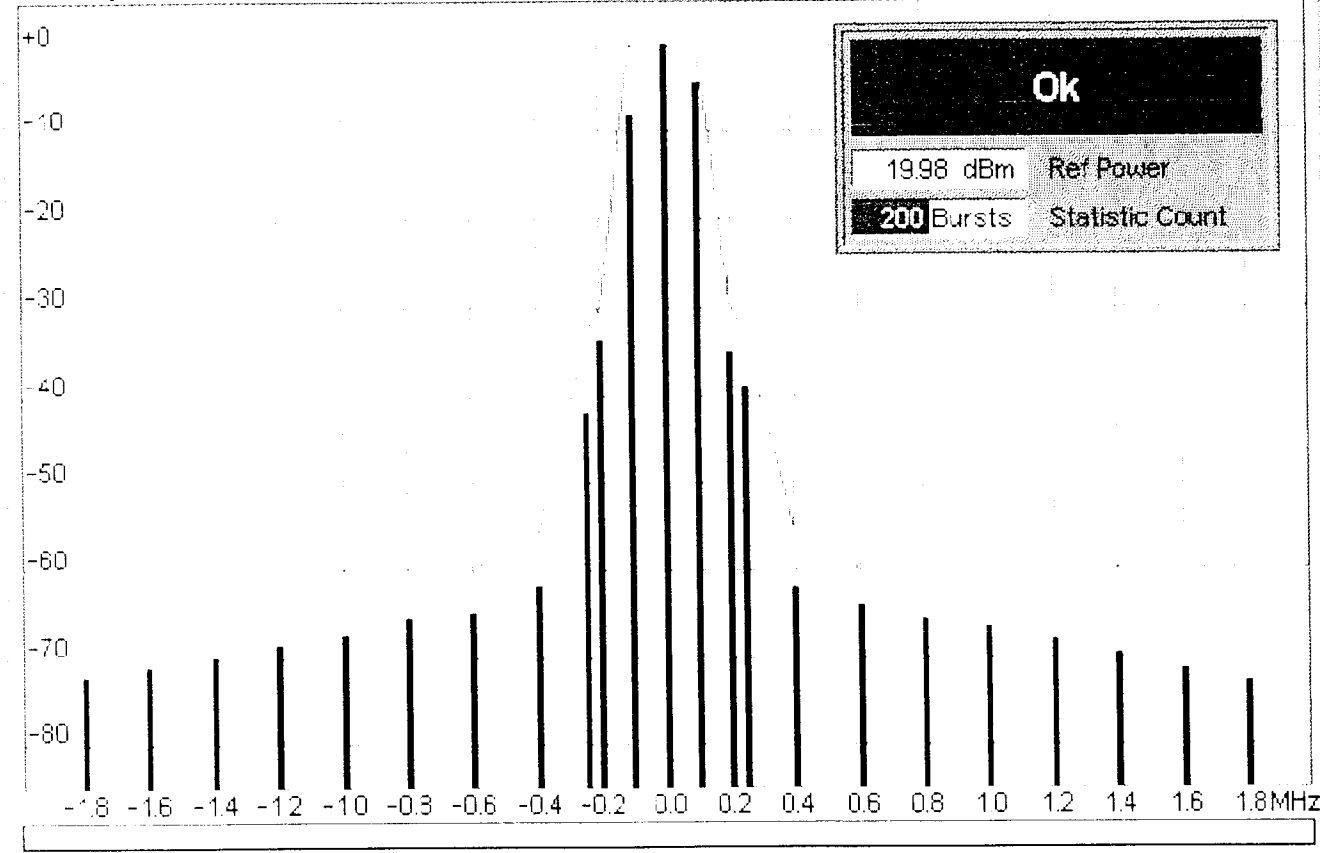
Group
Config.

GSM1900 Spectrum



Connect.
Control

dBc Max. Level: Auto Low Noise PCL: 0 / 30.0 dBm Chan./Freq.: 810 / 1909.6 MHz
3: --- / Off 0: --- / Off 2: --- / Off



due to
Mod.

Appli-
cation

PCL /
Channel

Input
Level

Marker

Trigger /
Statistics

Menus

Overview

Power

Modulation

Spectrum

Receiver
Quality