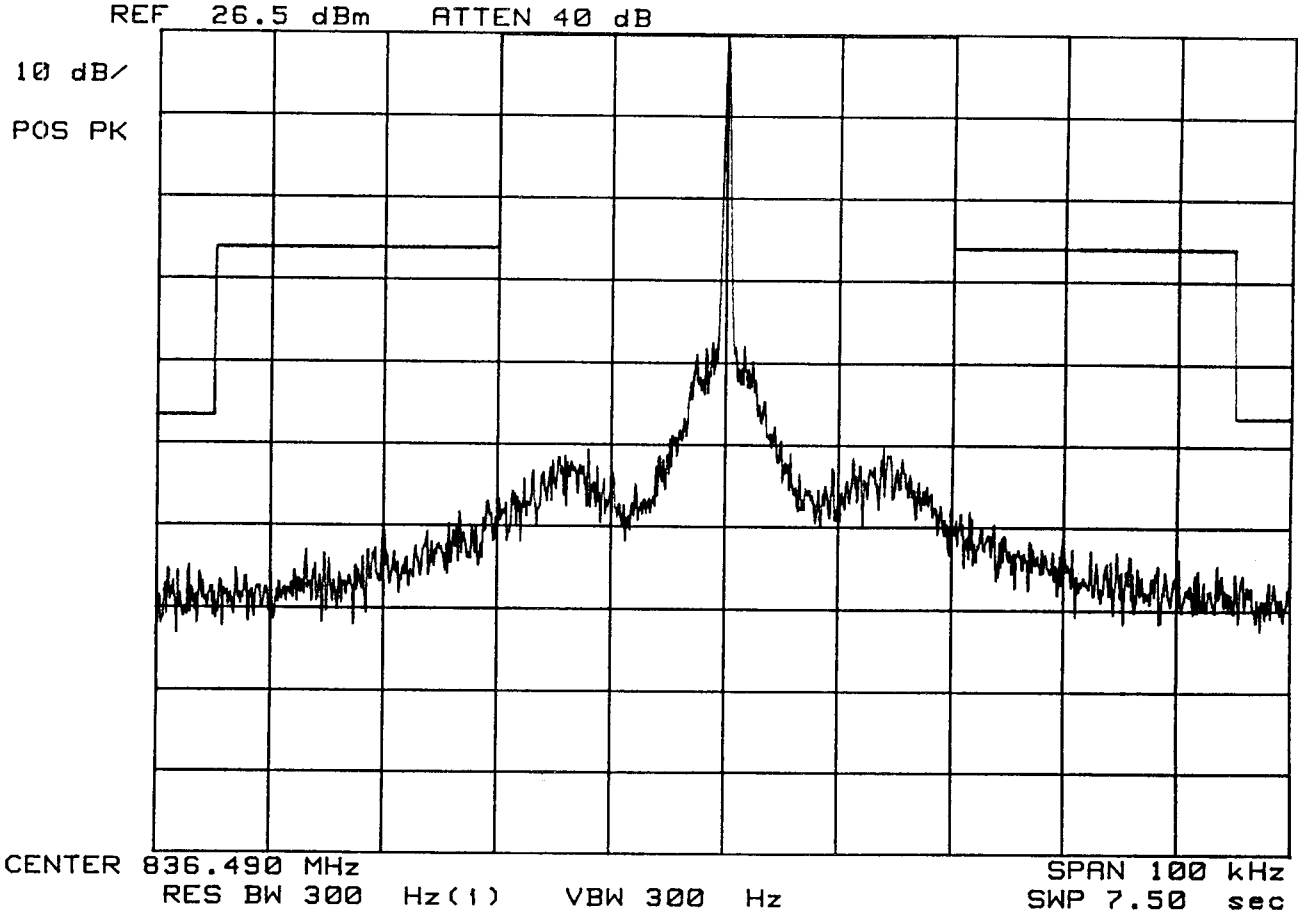
PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:Unmodulated Signal

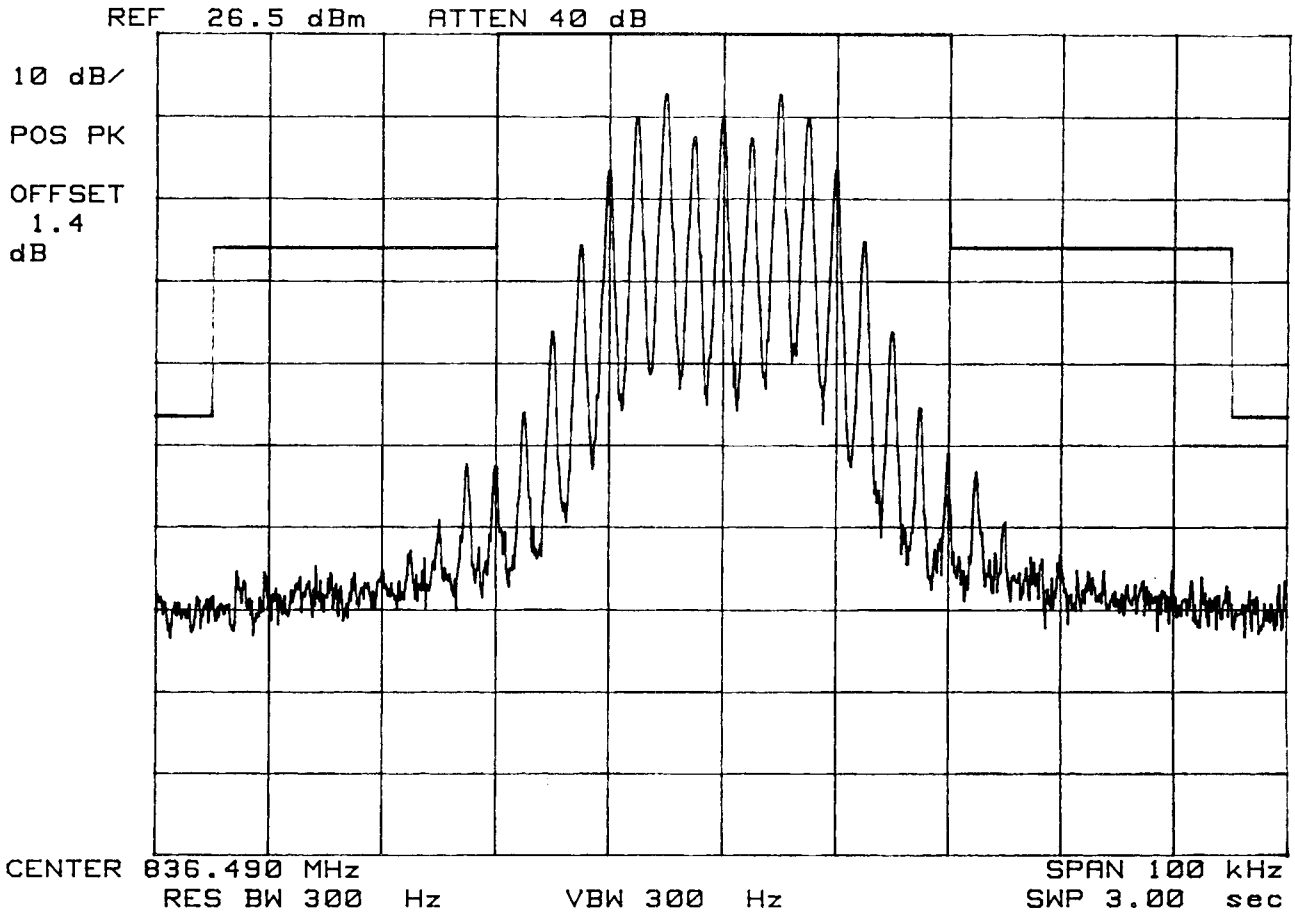


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:Voice

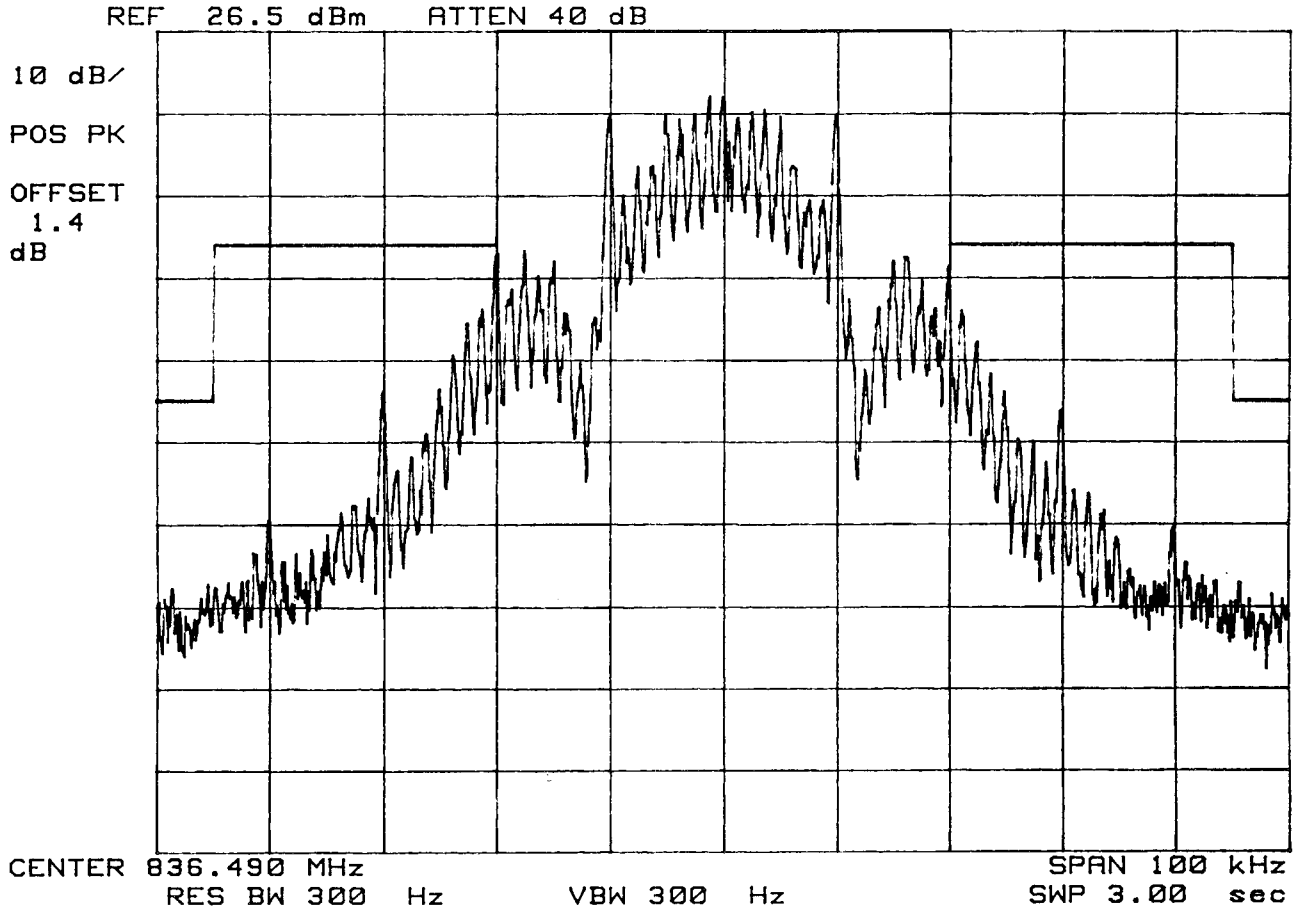


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:Wide Band Data

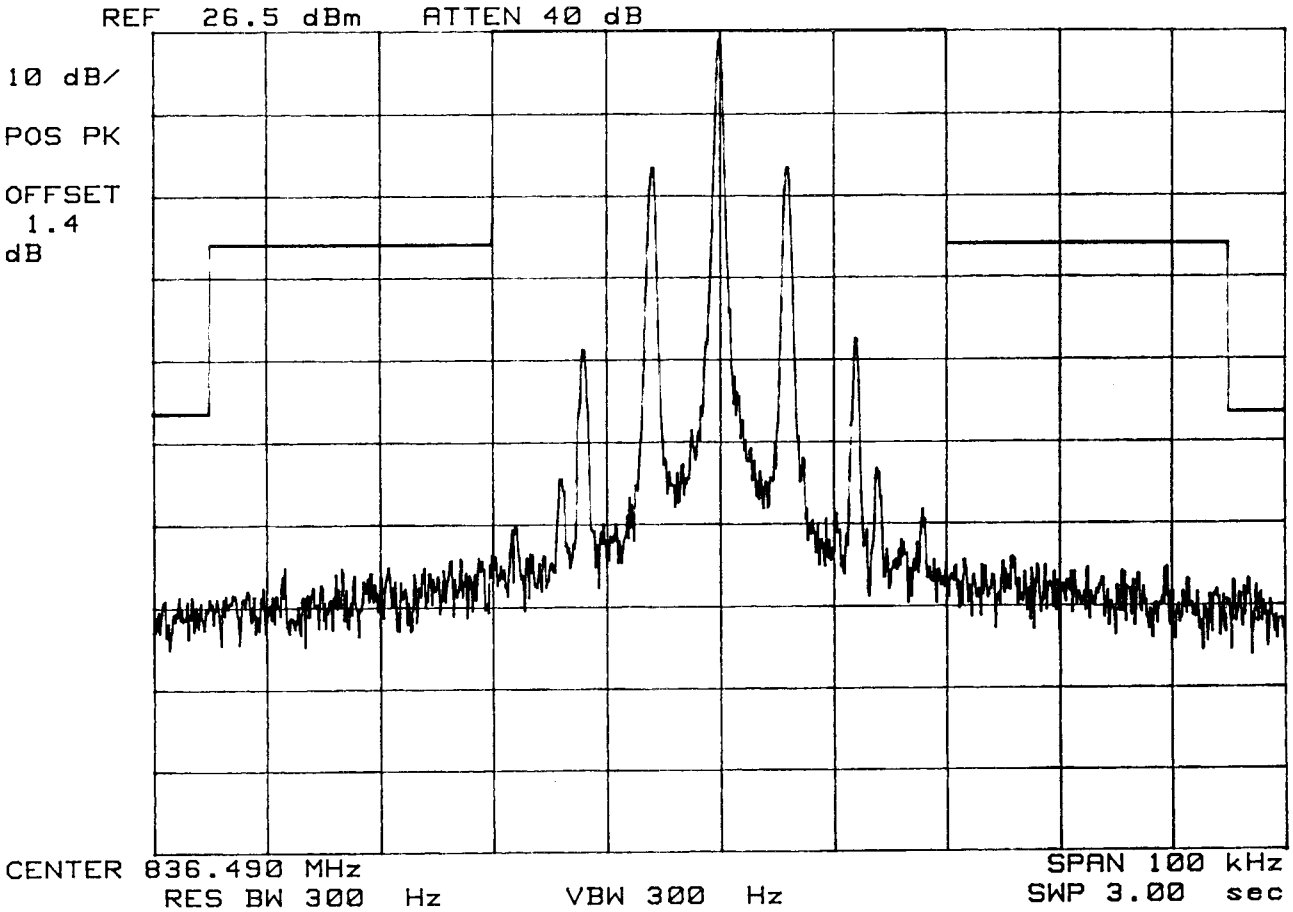


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:SAT

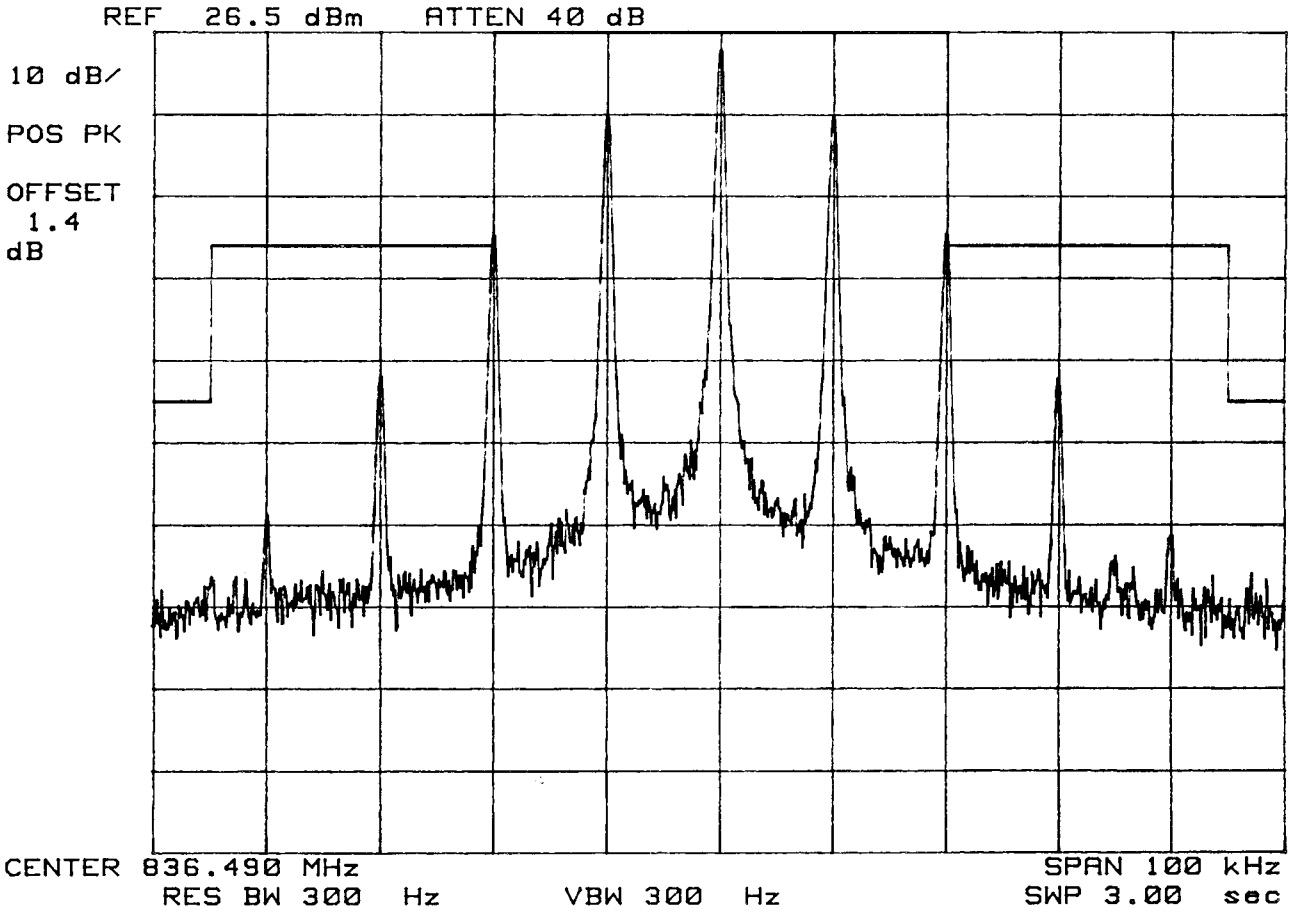


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:ST

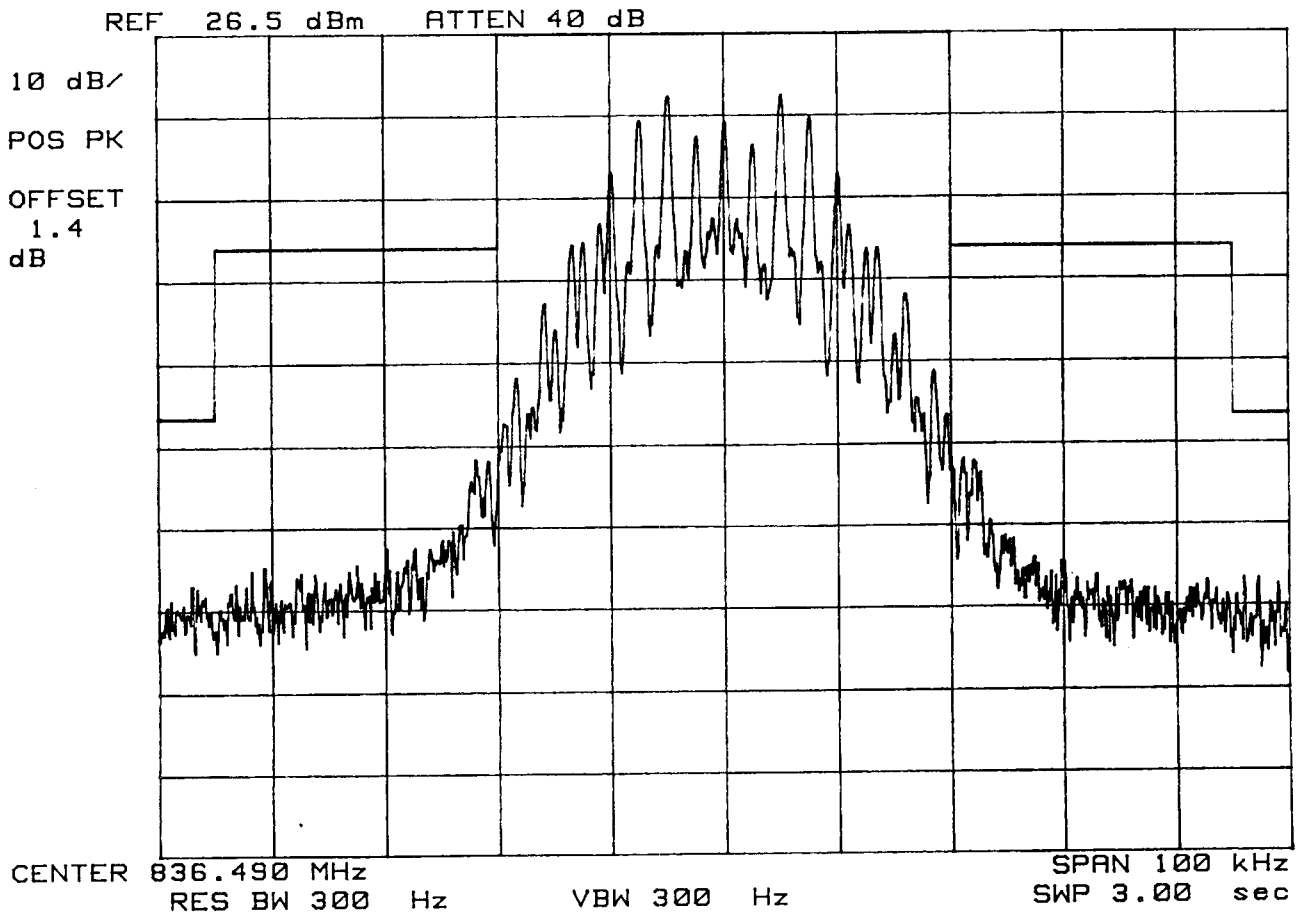


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

Test Mode:SAT + Voice

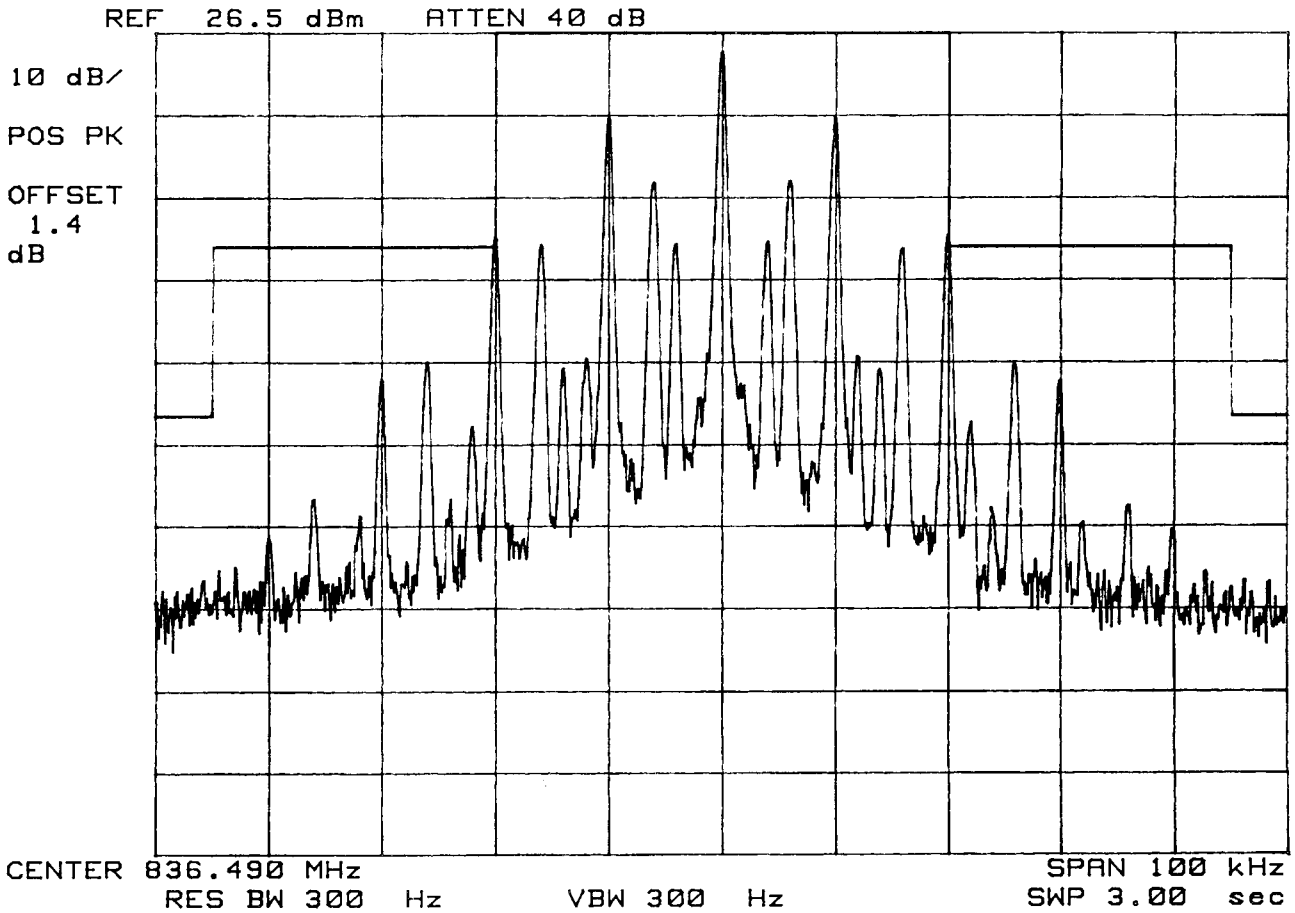


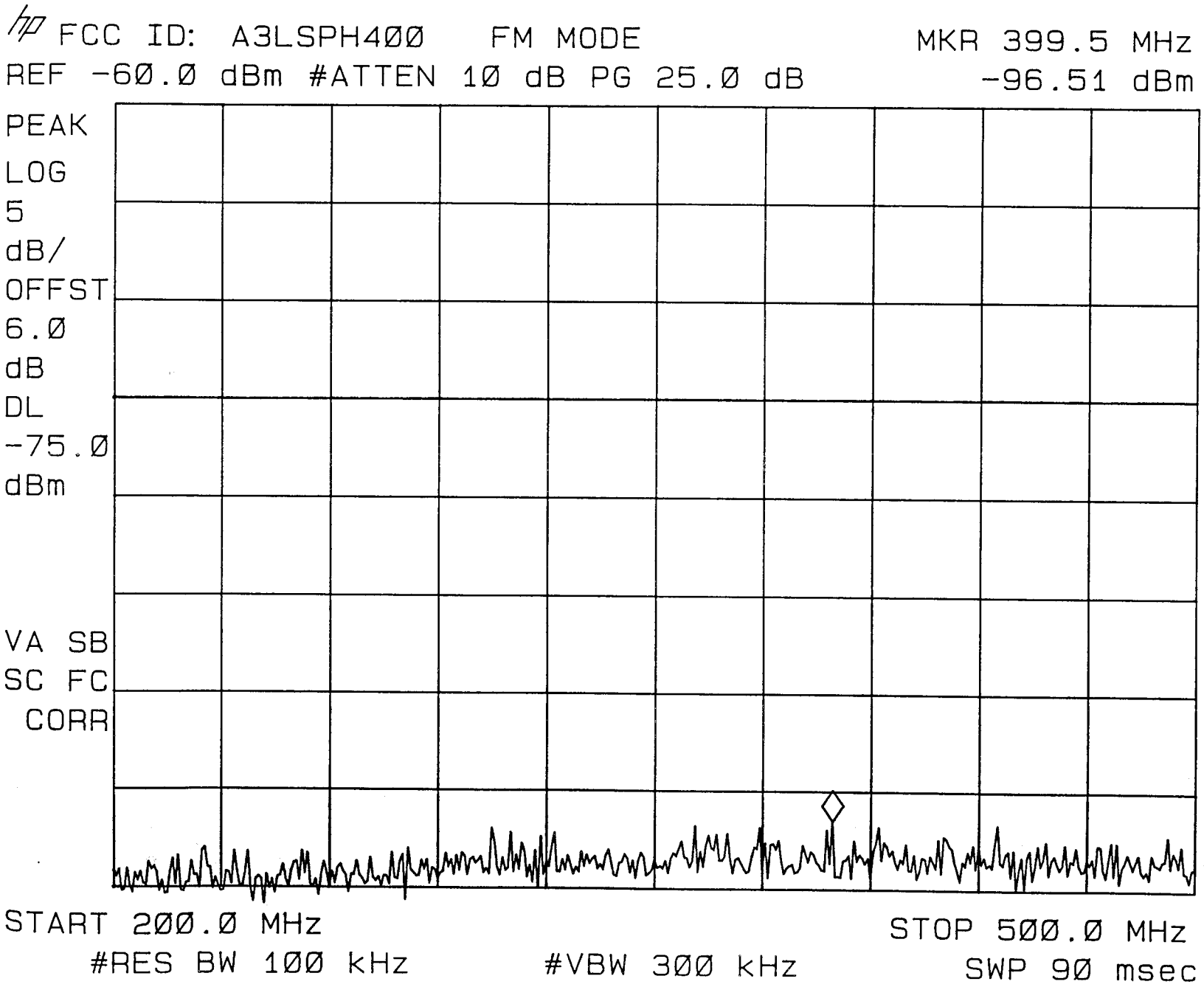
PCTEST Engineering Lab.

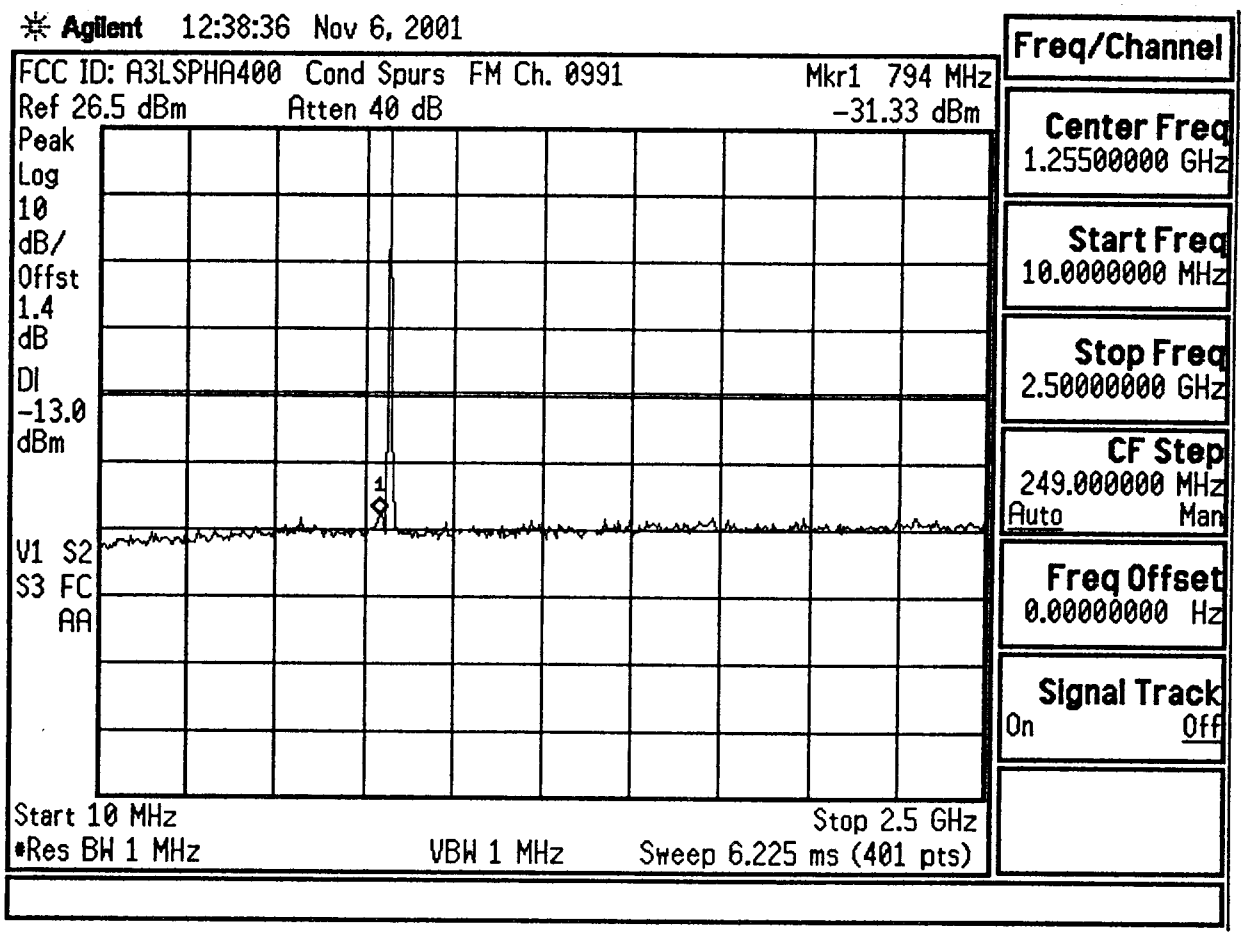
SPECTRUM ANALYZER PRESENTATION

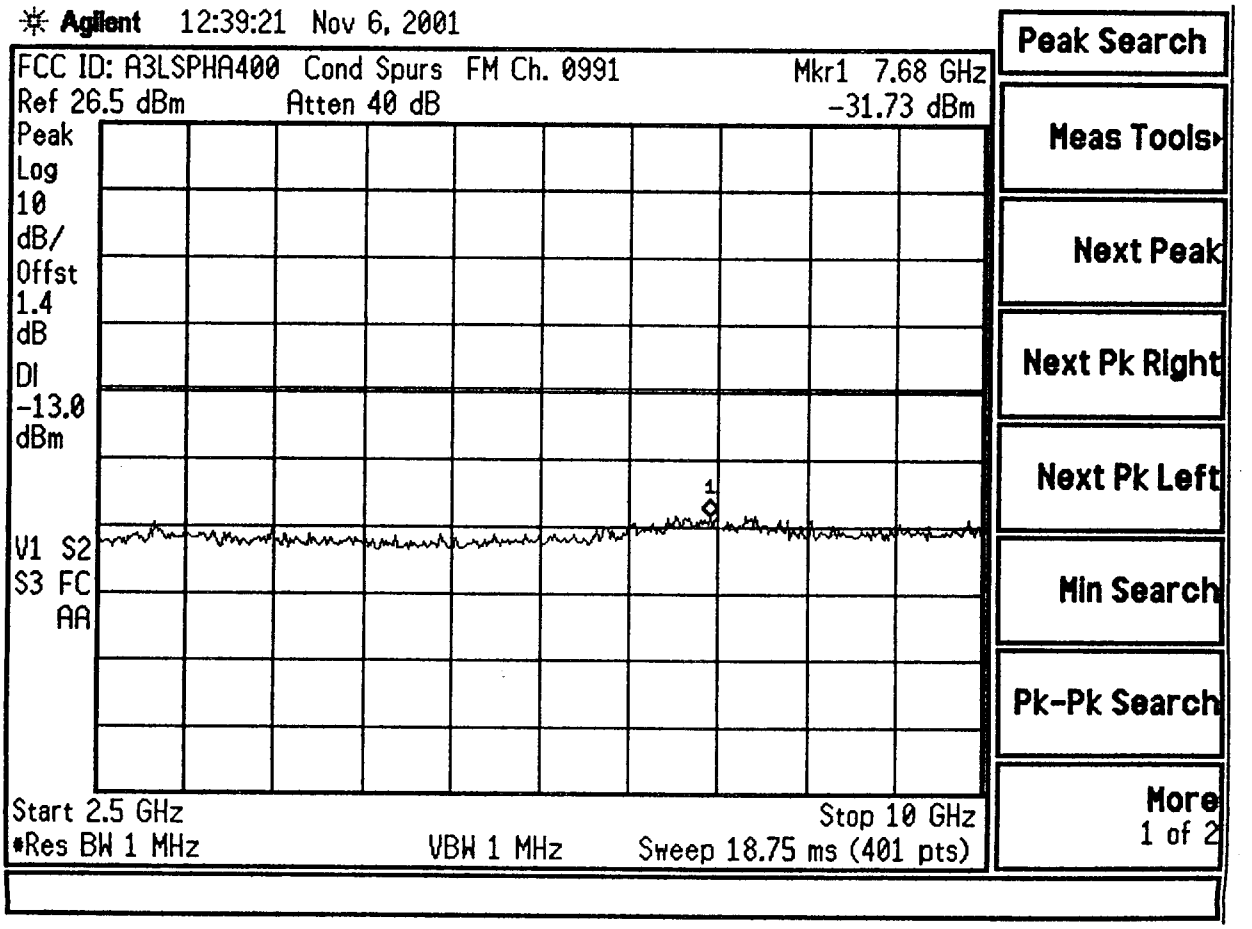
FCC ID:A3LSPHA400
SAMSUNG
Dual Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.5 dBm

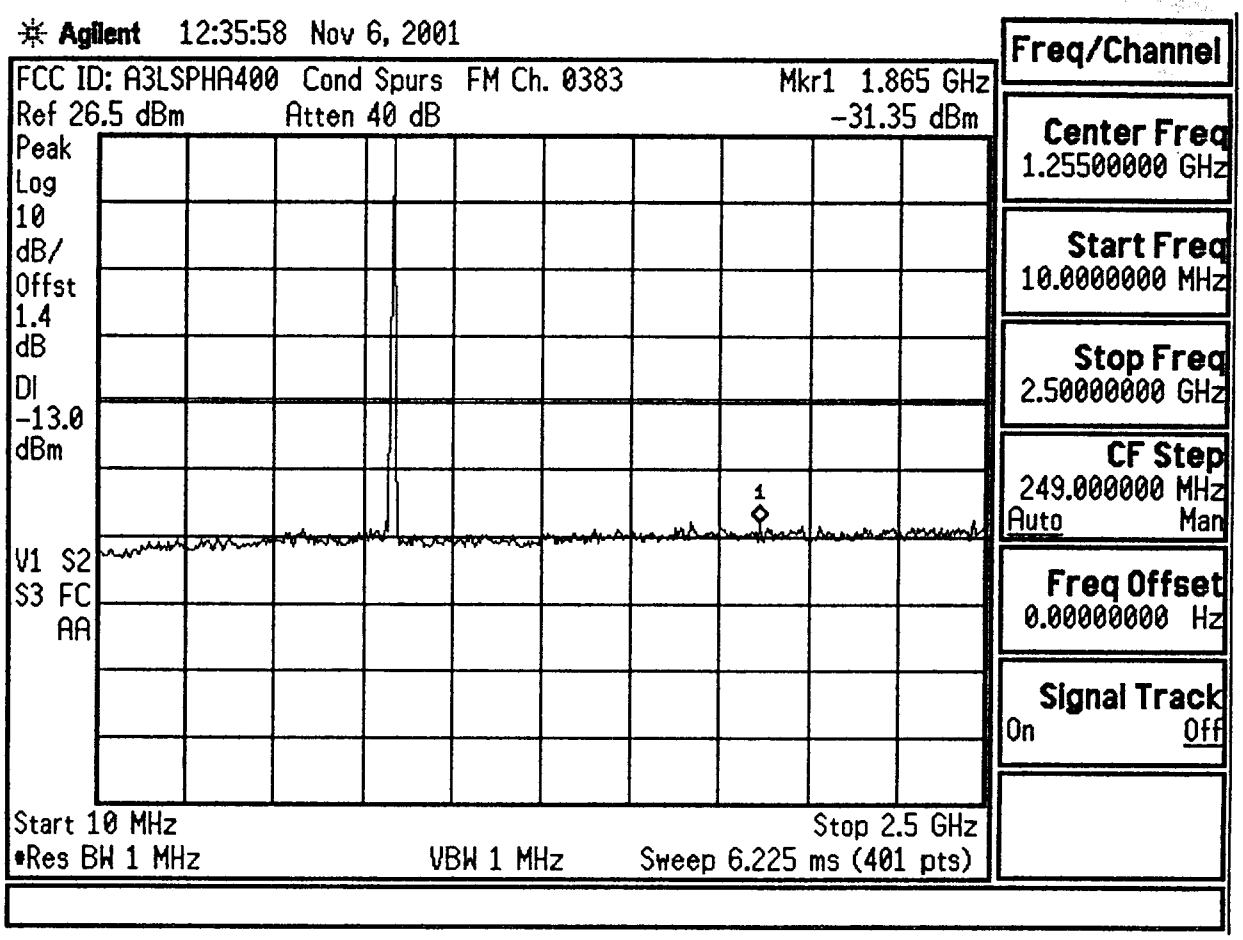
Test Mode:SAT + ST

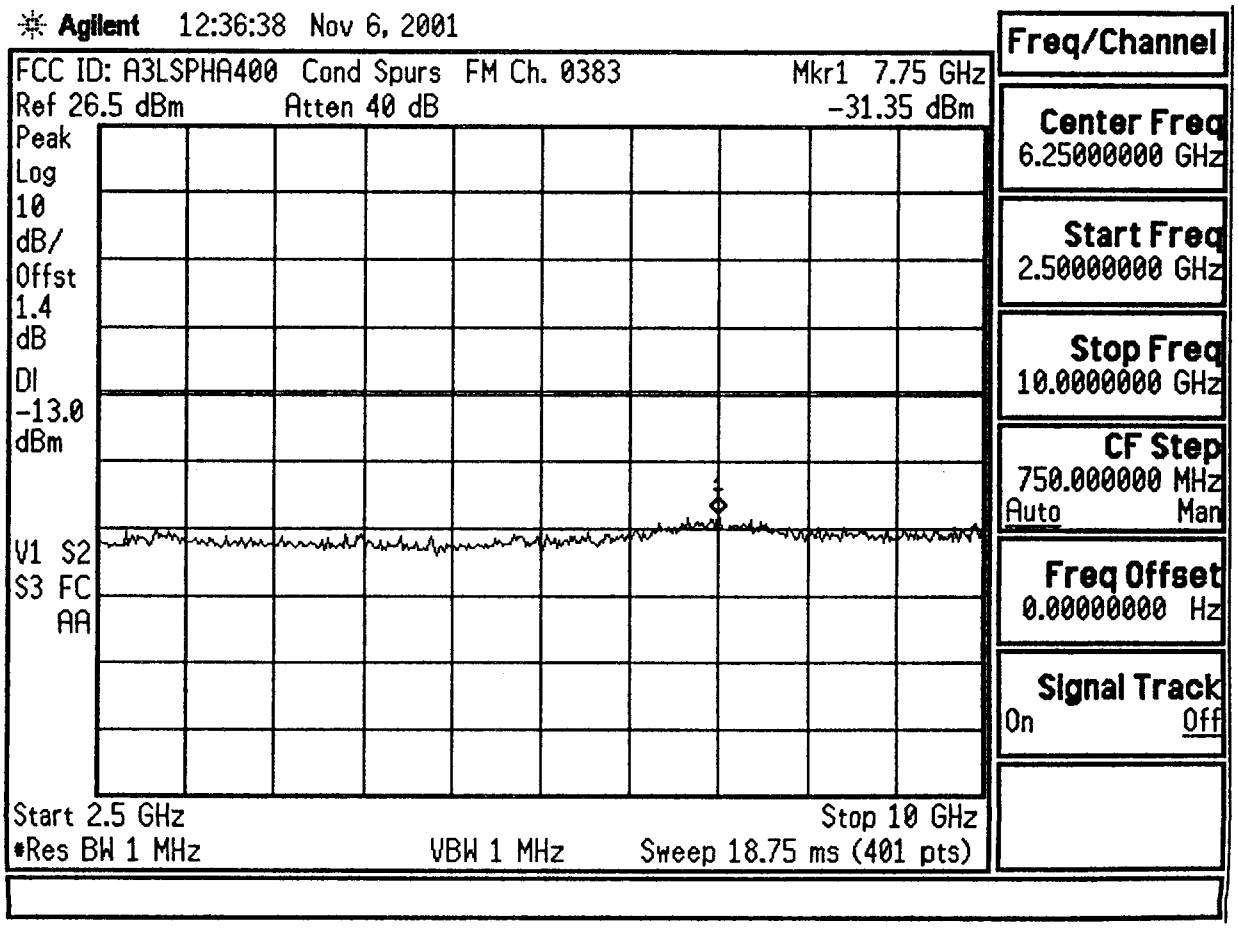


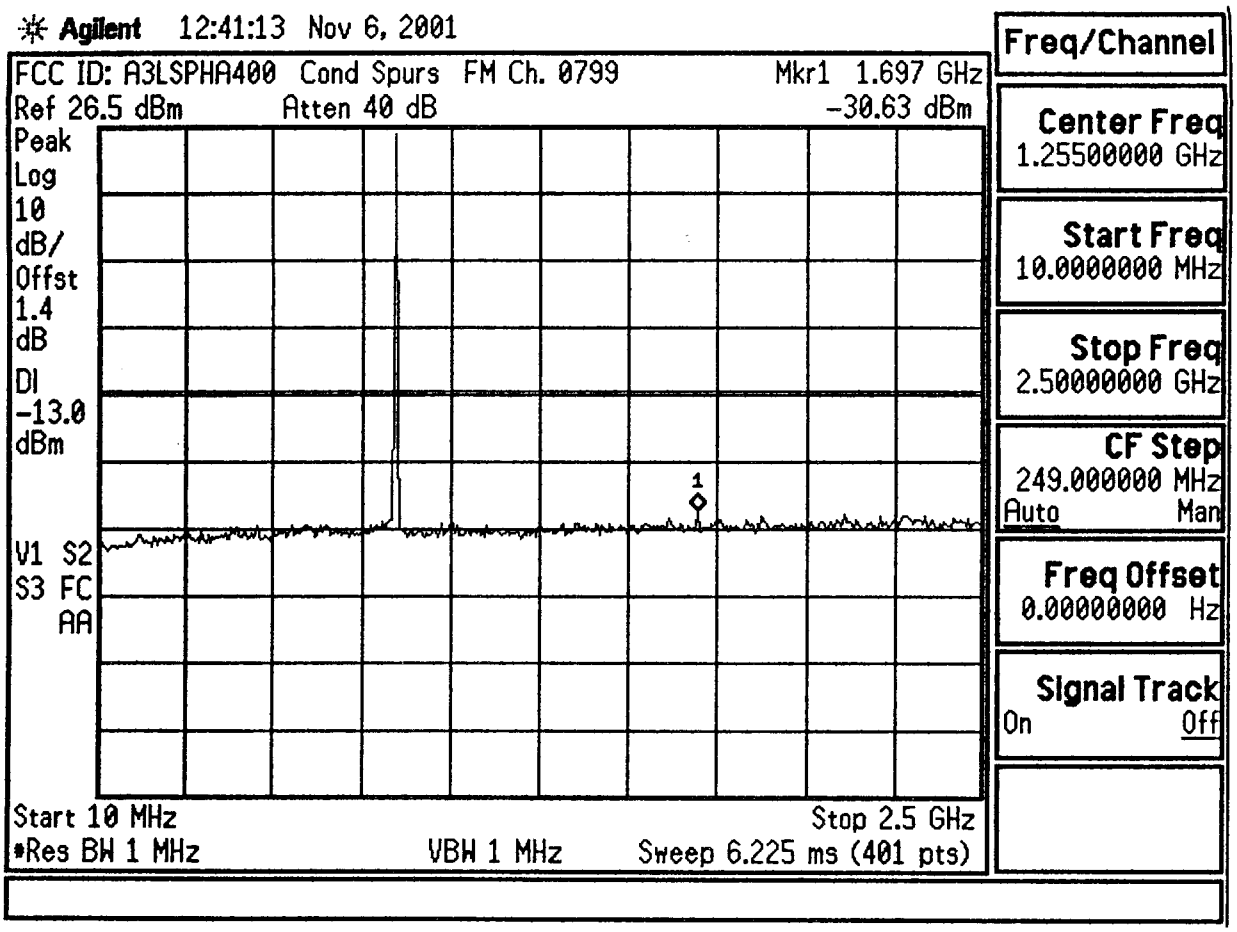

FCC ID: A3LSPH400 FM MODE
MKR 399.5 MHz
REF -60.0 dBm #ATTEN 10 dB PG 25.0 dB
-96.51 dBm
PEAK
LOG
5
dB/
OFFST
6.0
dB
DL
-75.0
dBm
VA SB
SC FC
CORR
START 200.0 MHz
STOP 500.0 MHz
#RES BW 100 kHz
#VBW 300 kHz
SWP 90 msec

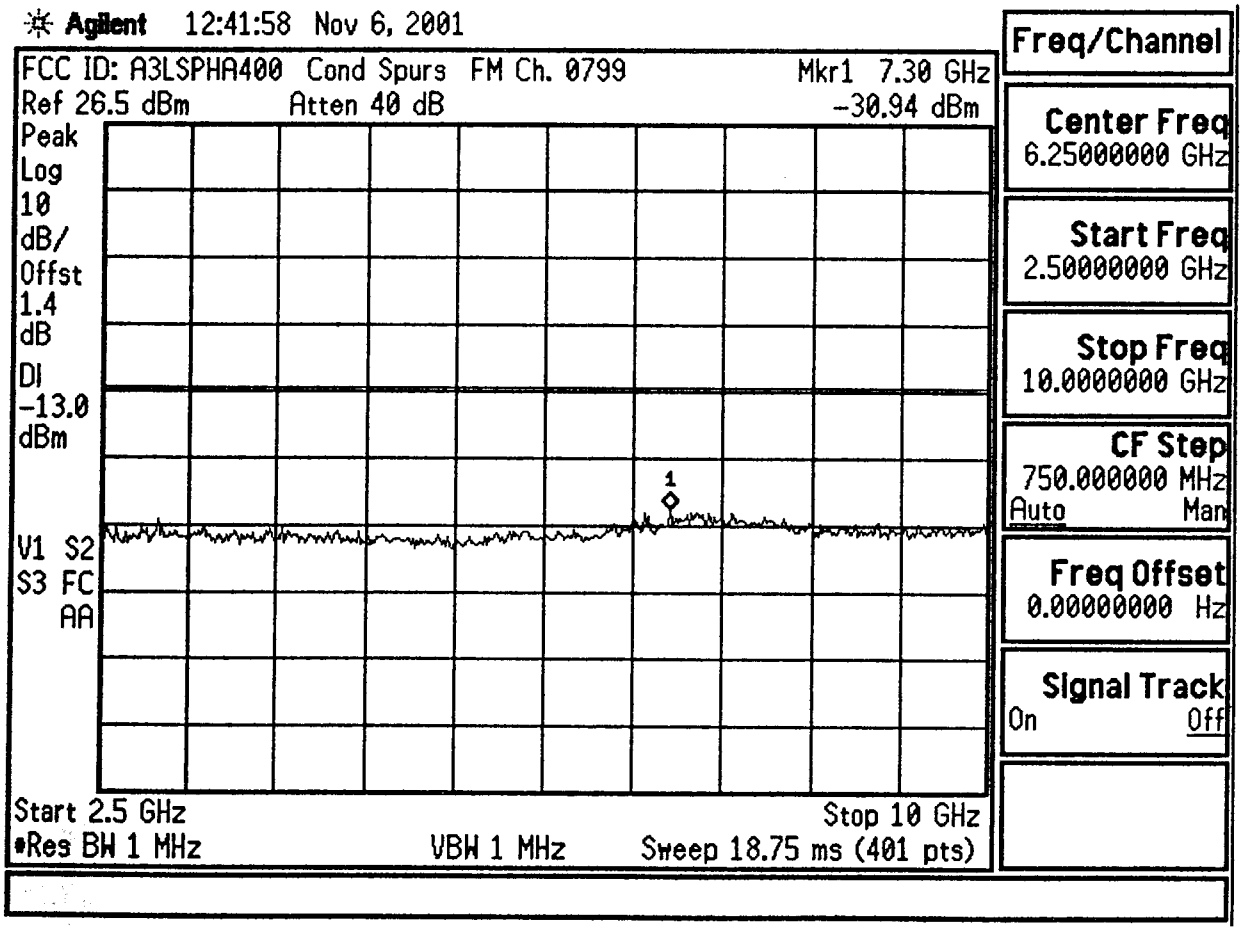

Agilent 12:38:36 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0991
Mkr1 794 MHz
Ref 26.5 dBm
Atten 40 dB
-31.33 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

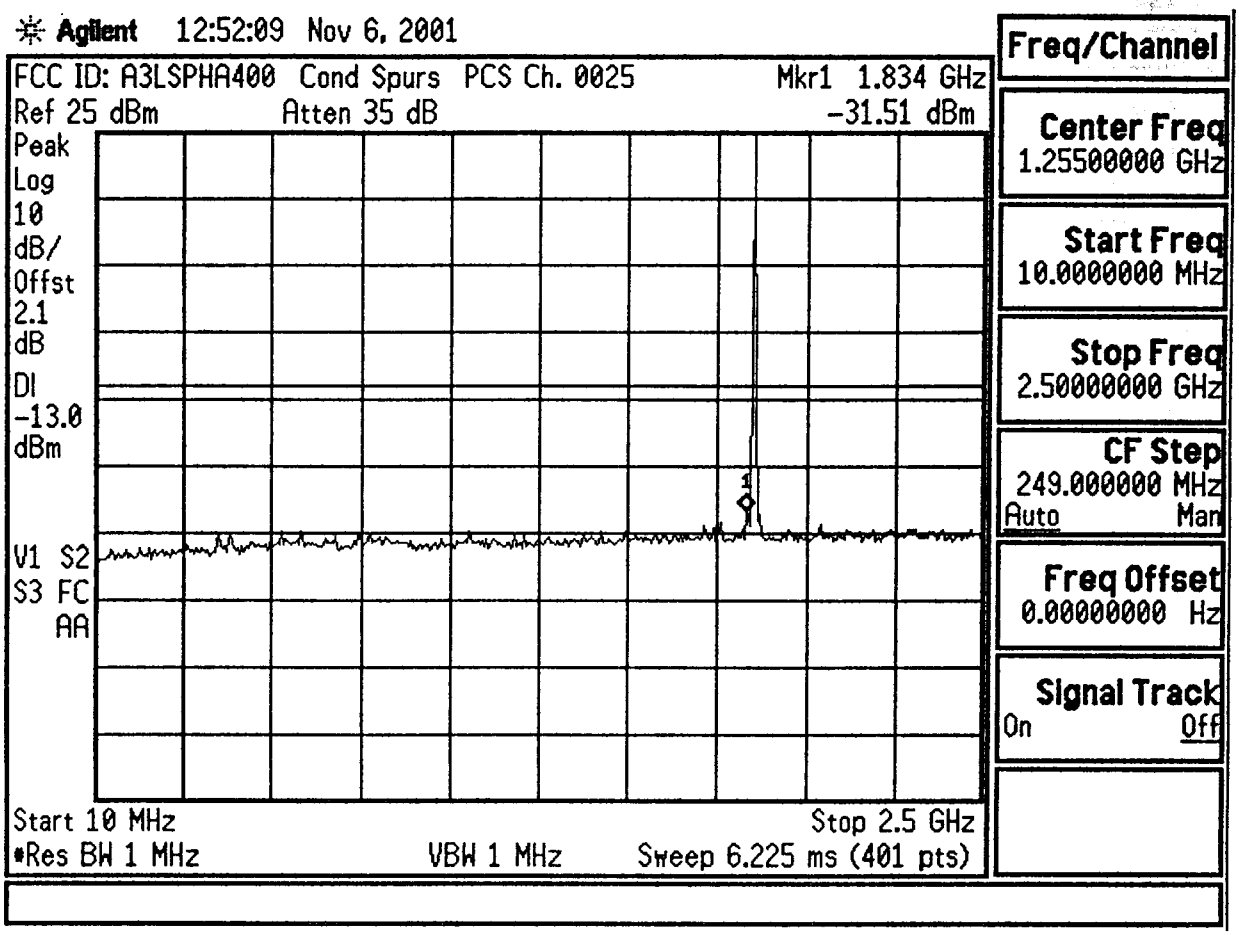

Agilent 12:39:21 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0991
Mkr1 7.68 GHz
Ref 26.5 dBm
Atten 40 dB
-31.73 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

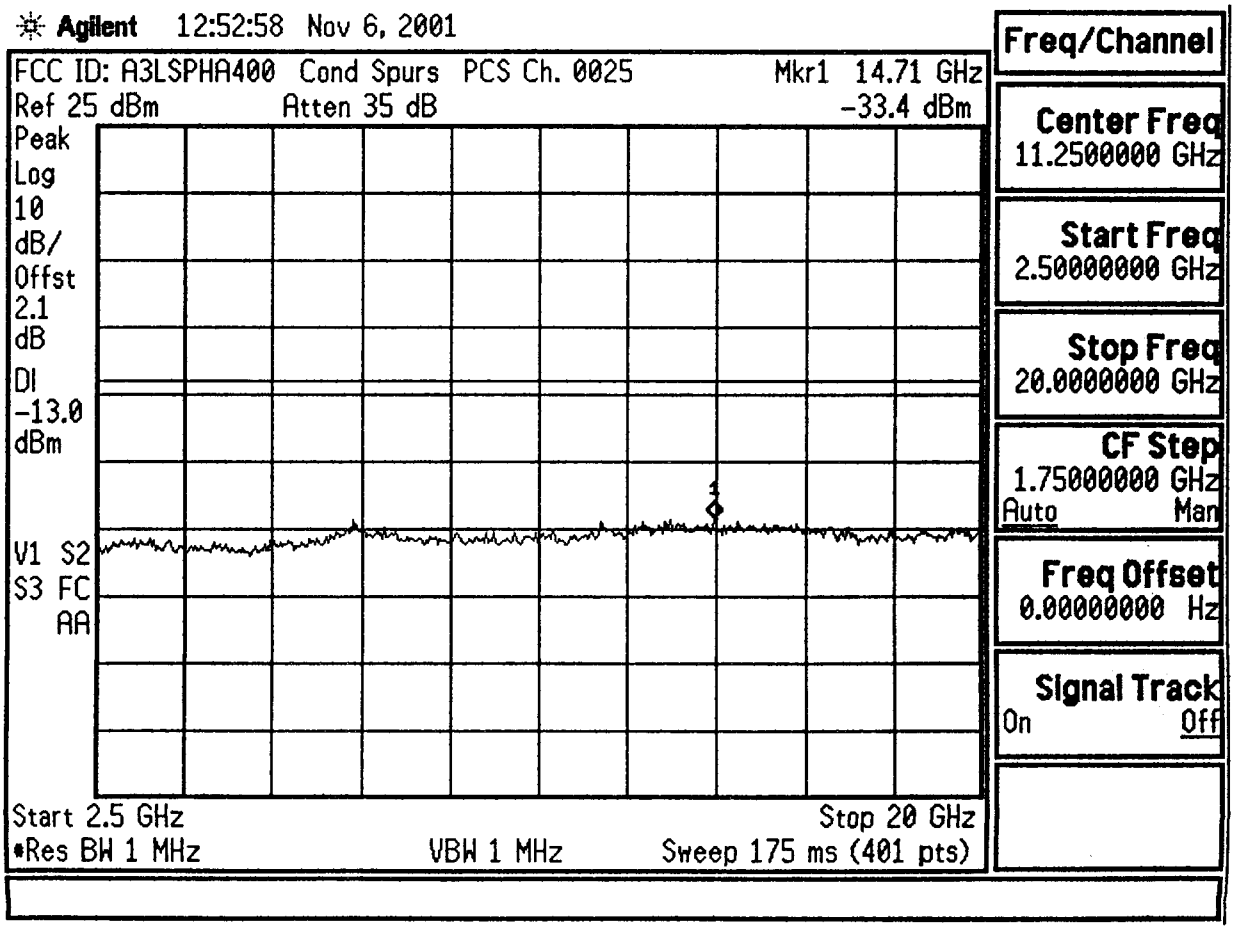

Agilent 12:35:58 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0383
Mkr1 1.865 GHz
Ref 26.5 dBm
Atten 40 dB
-31.35 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

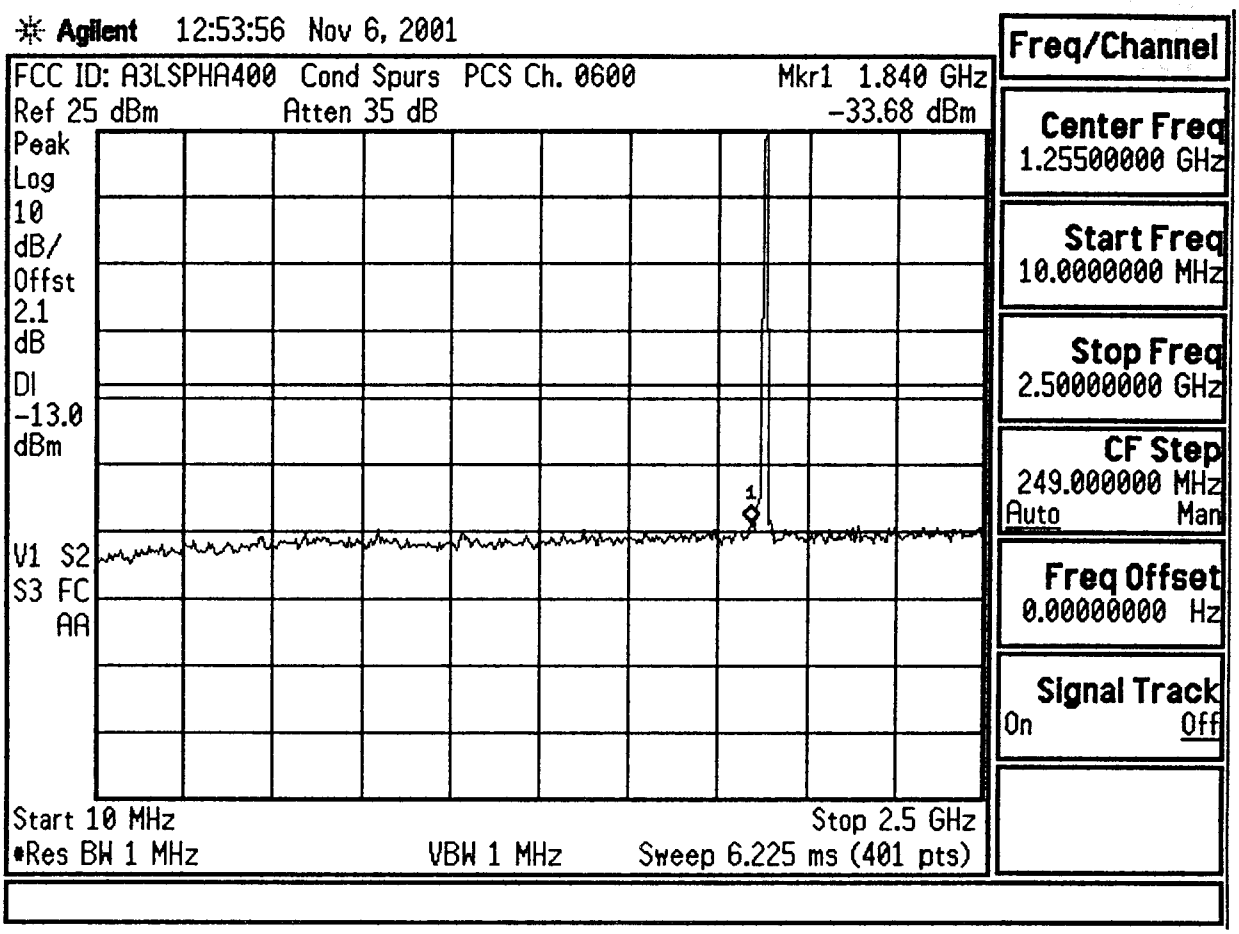

Agilent 12:36:38 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0383
Mkr1 7.75 GHz
Ref 26.5 dBm
Atten 40 dB
-31.35 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

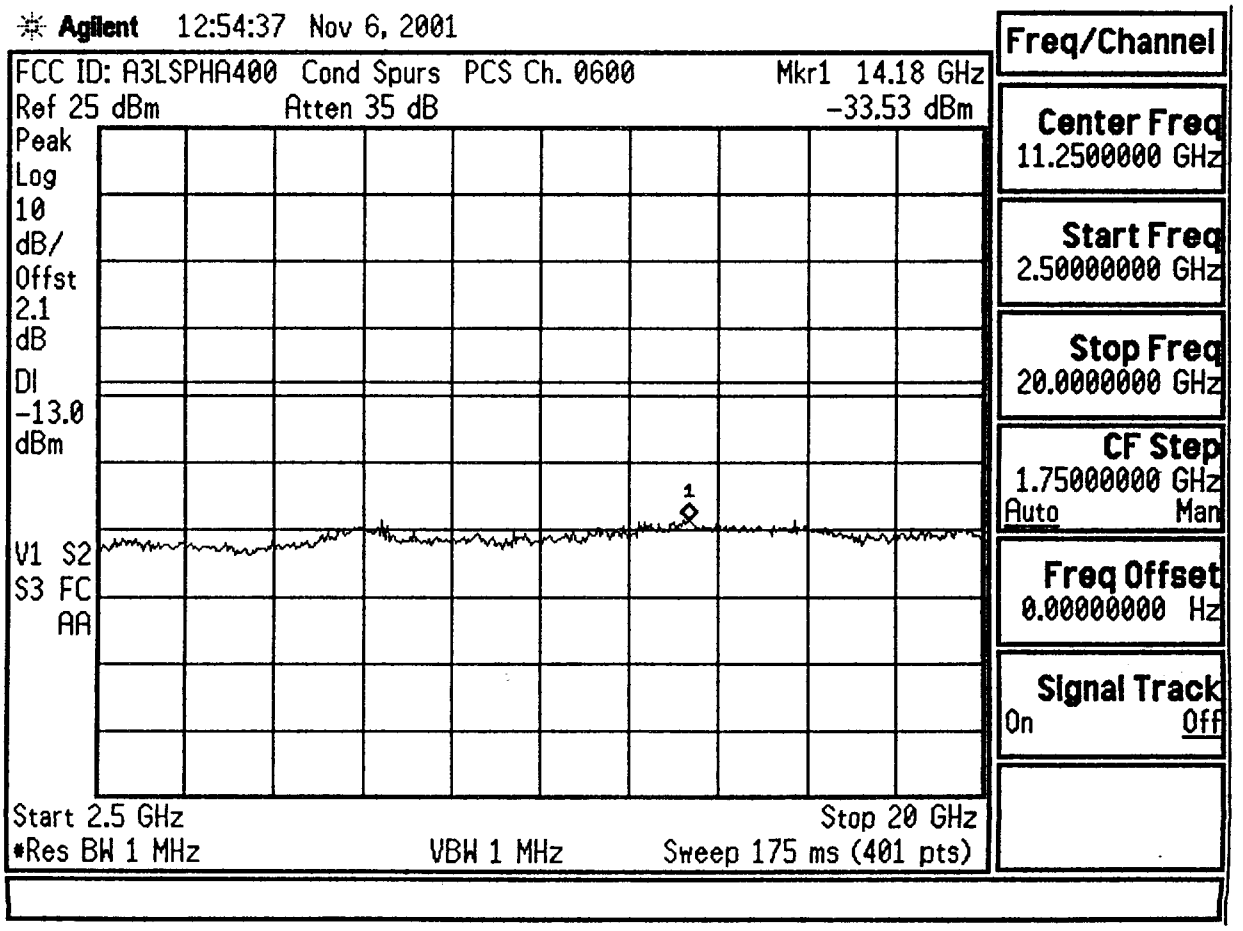

Agilent 12:41:13 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0799
Mkr1 1.697 GHz
Ref 26.5 dBm
Atten 40 dB
-30.63 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start 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

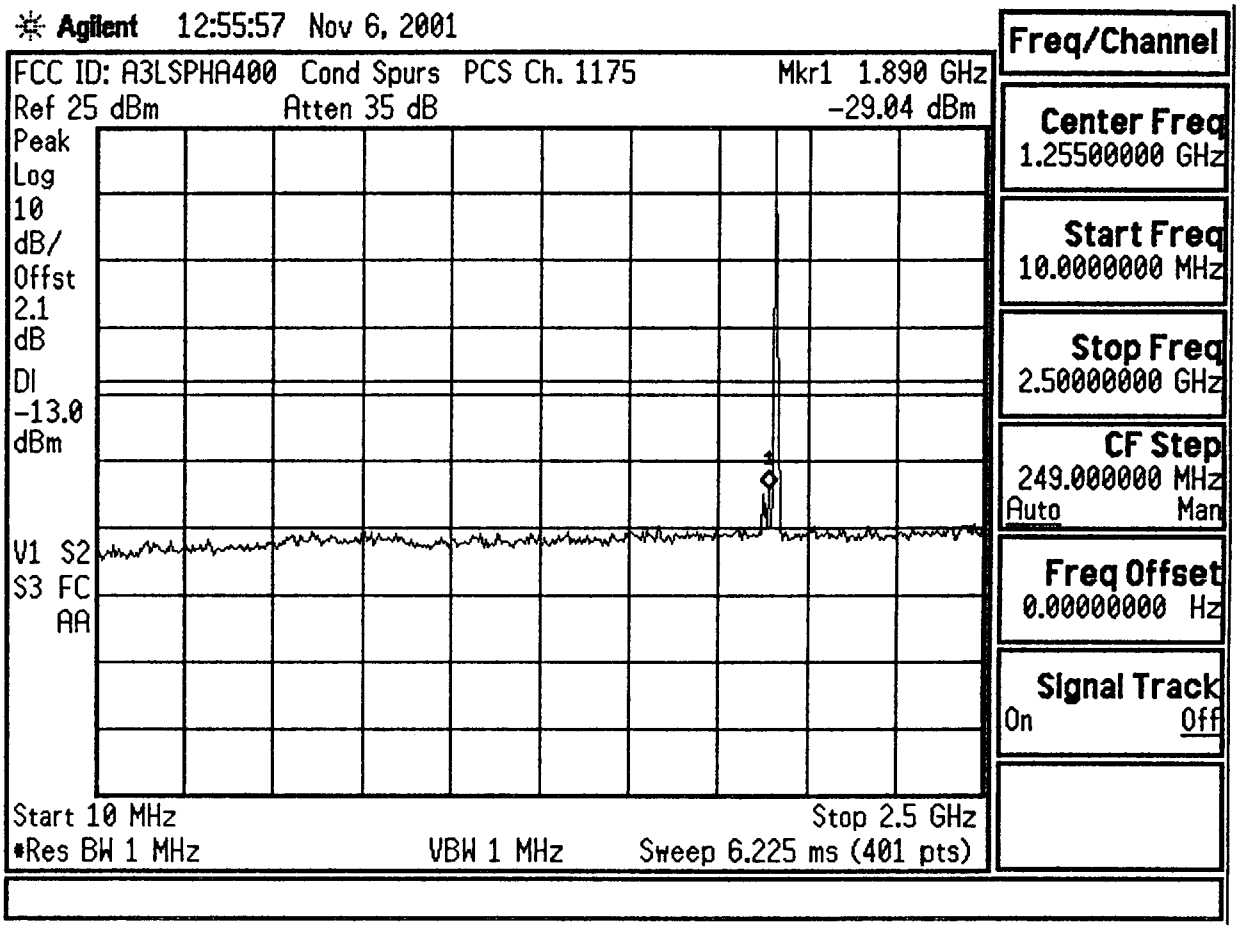

Agilent 12:41:58 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs FM Ch. 0799
Mkr1 7.30 GHz
Ref 26.5 dBm
Atten 40 dB
-30.94 dBm
Peak
Log
10
dB/
Offst
1.4
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start 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

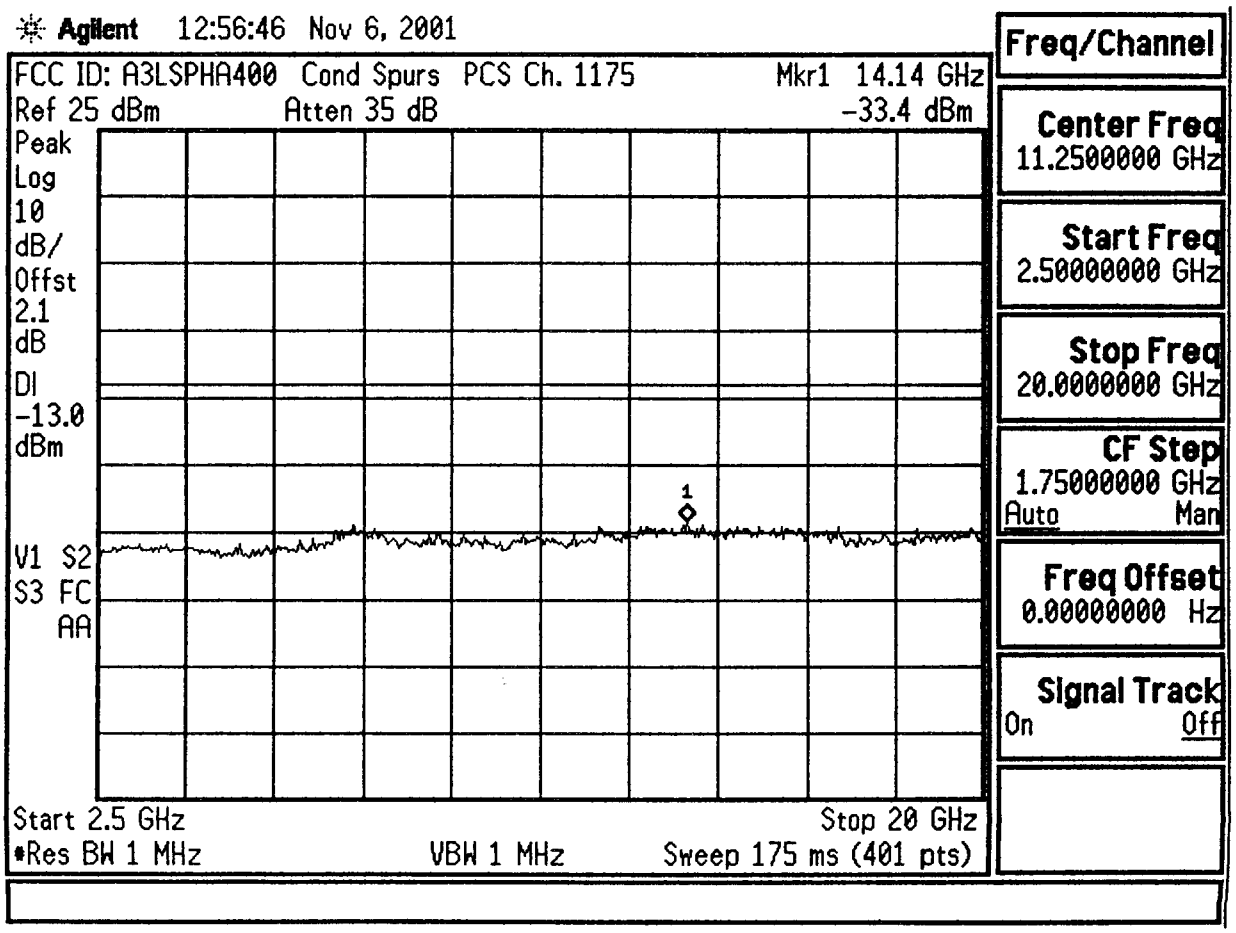

Agilent 12:52:09 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 0025
Mkr1 1.834 GHz
Ref 25 dBm
Atten 35 dB
-31.51 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

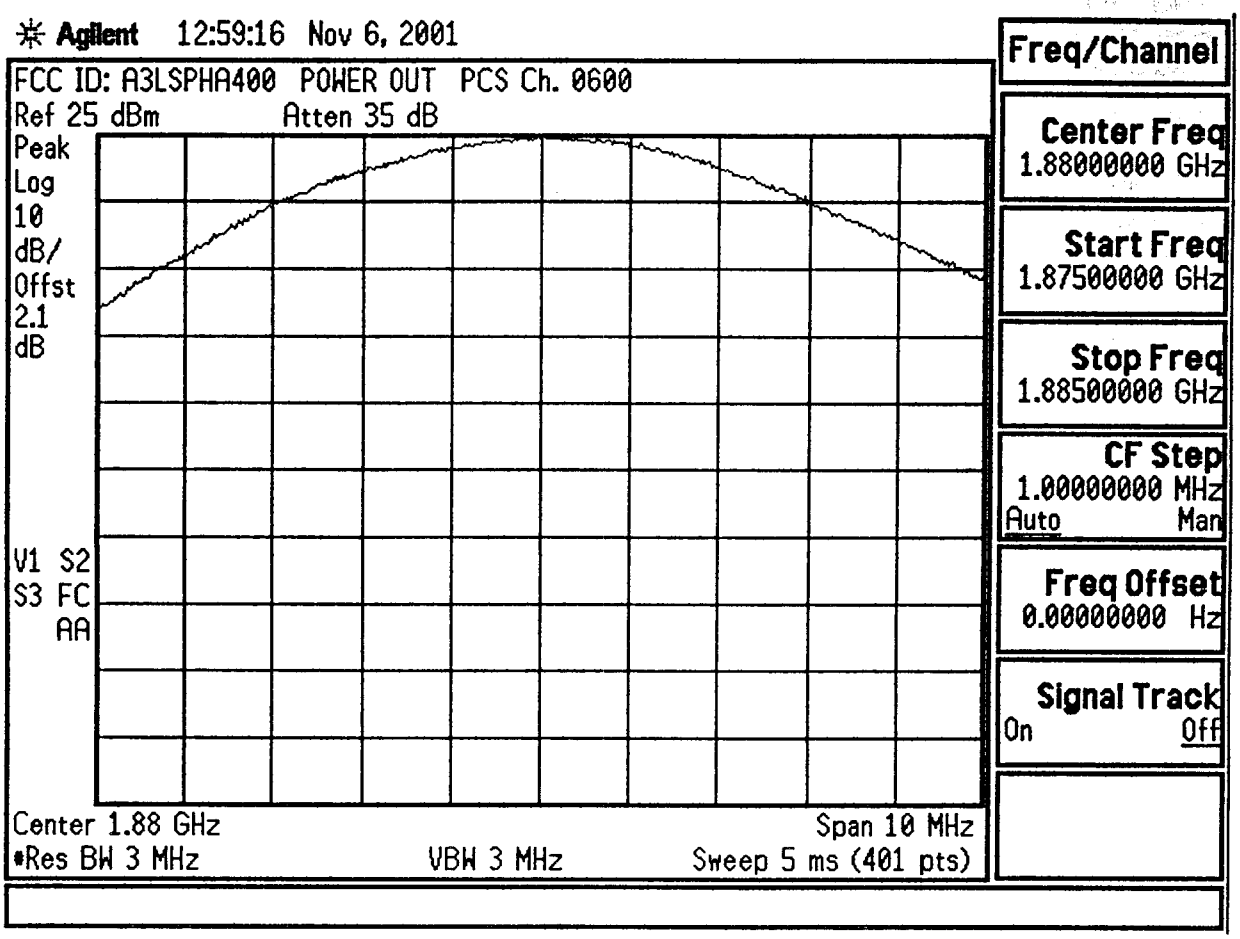

Agilent 12:52:58 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 0025
Mkr1 14.71 GHz
Ref 25 dBm
Atten 35 dB
-33.4 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 20 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 175 ms (401 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

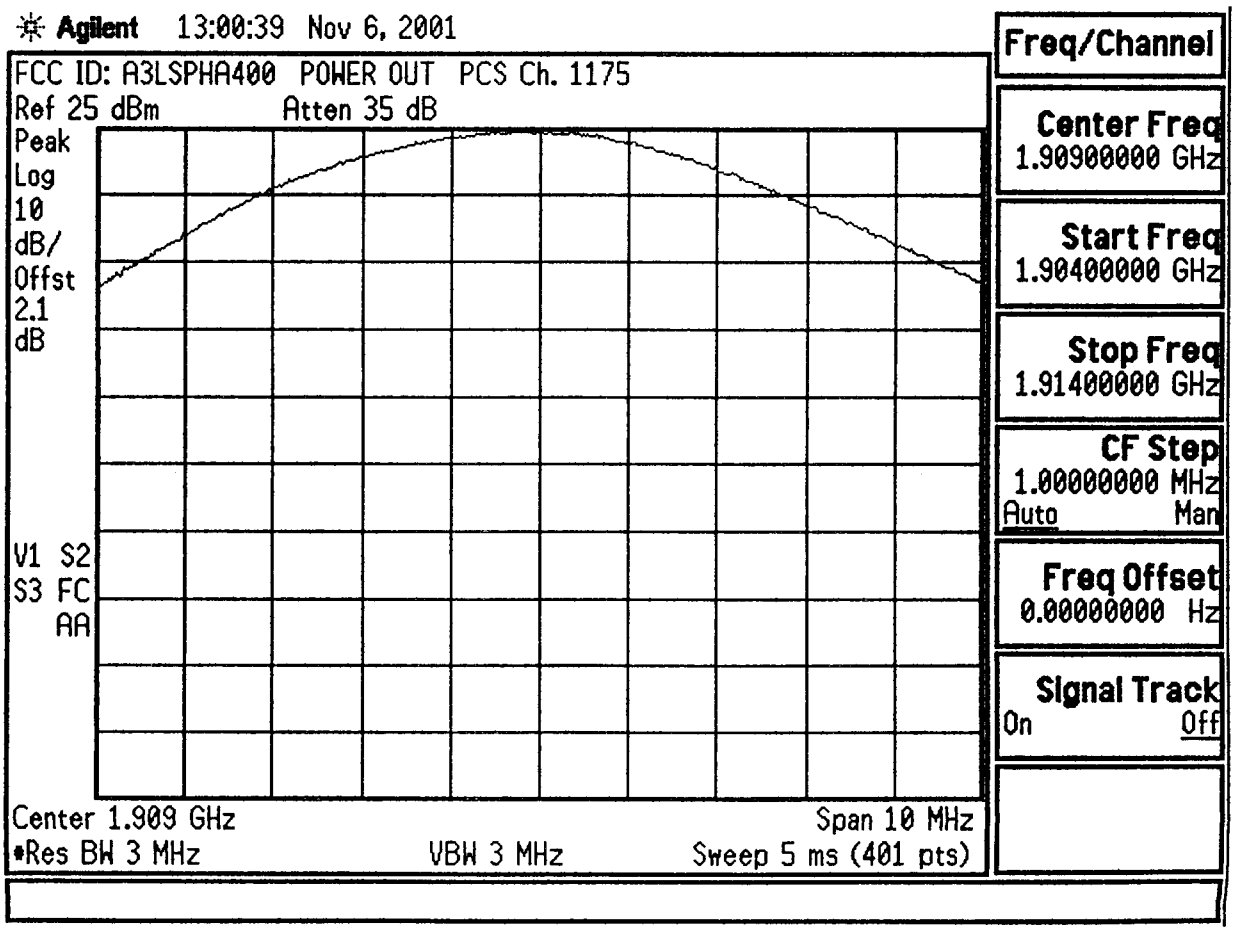

Agilent 12:53:56 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 0600
Mkr1 1.840 GHz
Ref 25 dBm
Atten 35 dB
-33.68 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

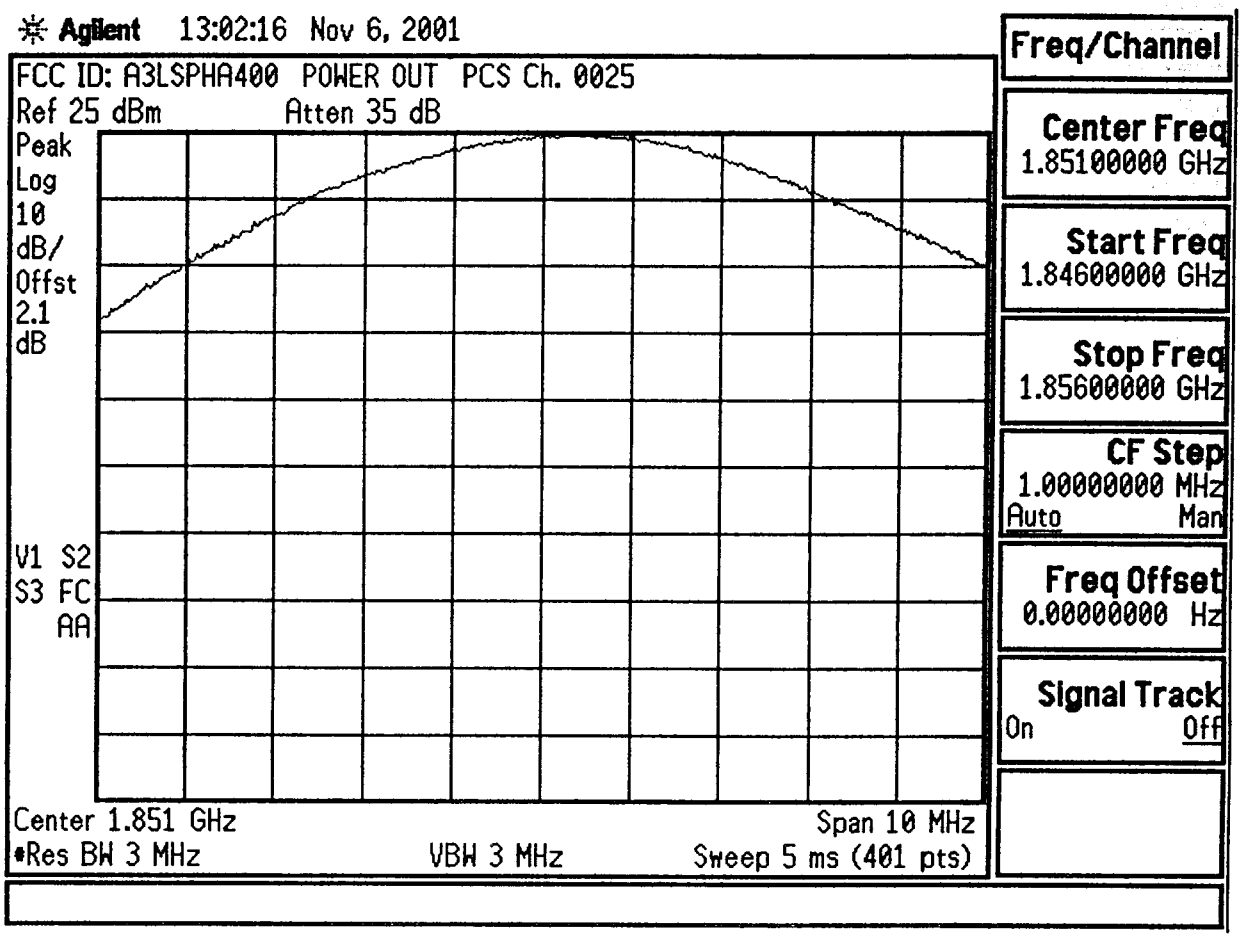

Agilent 12:54:37 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 0600
Mkr1 14.18 GHz
Ref 25 dBm
Atten 35 dB
-33.53 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 20 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 175 ms (401 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

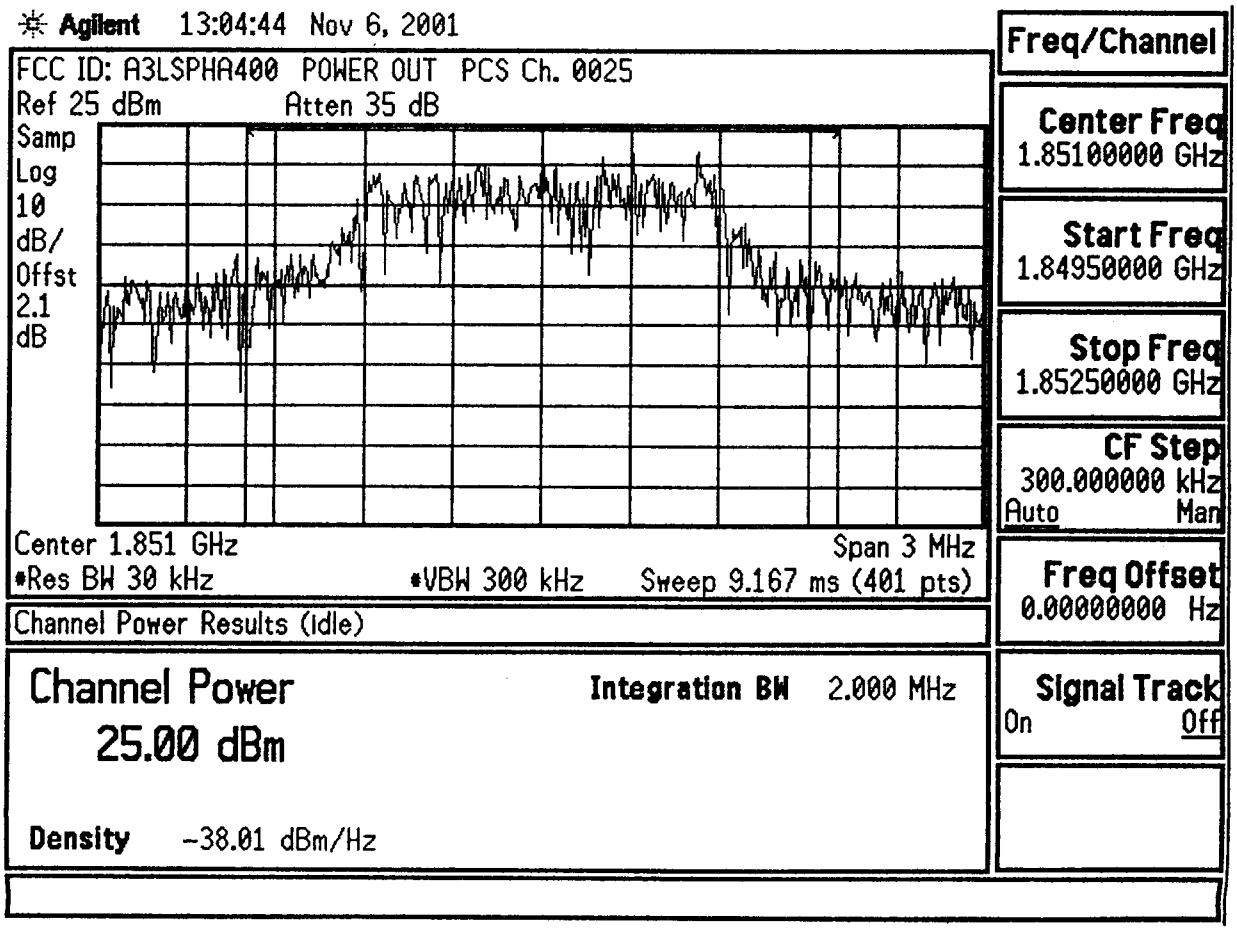

Agilent 12:55:57 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 1175
Mkr1 1.890 GHz
Ref 25 dBm
Atten 35 dB
-29.04 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 6.225 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
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 12:56:46 Nov 6, 2001
FCC ID: A3LSPHA400 Cond Spurs PCS Ch. 1175
Mkr1 14.14 GHz
Ref 25 dBm
Atten 35 dB
-33.4 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 20 GHz
#Res BW 1 MHz
VBW 1 MHz
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 12:59:16 Nov 6, 2001
FCC ID: A3LSPHA400 POWER OUT PCS Ch. 0600
Ref 25 dBm Atten 35 dB
Peak
Log
10
dB/
Offst
2.1
dB
V1 S2
S3 FC
AA
Center 1.88 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 5 ms (401 pts)
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 13:00:39 Nov 6, 2001
FCC ID: A3LSPHA400 POWER OUT PCS Ch. 1175
Ref 25 dBm Atten 35 dB
Peak
Log
10
dB/
Offst
2.1
dB
V1 S2
S3 FC
AA
Center 1.909 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 5 ms (401 pts)
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 13:02:16 Nov 6, 2001
FCC ID: A3LSPHA400 POWER OUT PCS Ch. 0025
Ref 25 dBm Atten 35 dB
Peak
Log
10
dB/
Offst
2.1
dB
V1 S2
S3 FC
AA
Center 1.851 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 5 ms (401 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

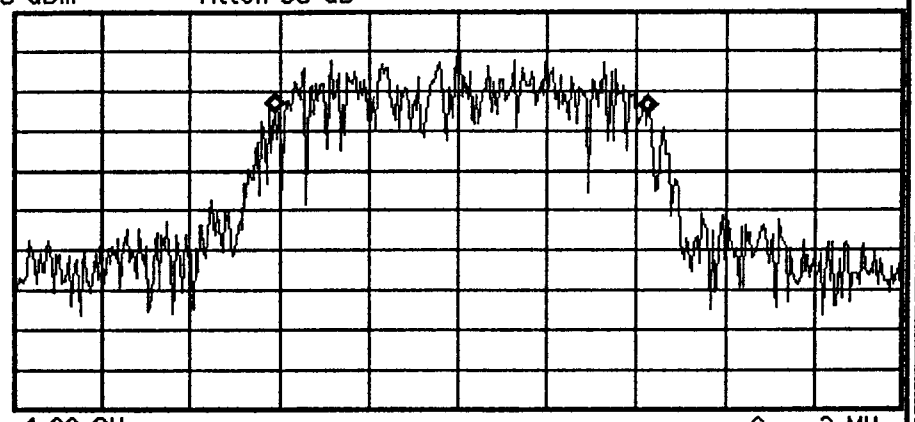

Agilent 13:04:44 Nov 6, 2001
FCC ID: A3LSPHA400 POWER OUT PCS Ch. 0025
Ref 25 dBm Atten 35 dB
Samp
Log
10
dB/
Offst
2.1
dB
Center 1.851 GHz
Span 3 MHz
#Res BW 30 kHz
#VBW 300 kHz
Sweep 9.167 ms (401 pts)
Channel Power Results (idle)
Channel Power
25.00 dBm
Integration BW 2.000 MHz
Density -38.01 dBm/Hz
Freq/Channel
Center Freq
1.85100000 GHz
Start Freq
1.84950000 GHz
Stop Freq
1.85250000 GHz
CF Step
300.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

Agilent 13:07:54 Nov 6, 2001

FCC ID: A3LSPHA400 POWER OUT PCS Ch. 0600

Ref 25 dBm Atten 35 dB

Samp
Log
10
dB/
Offst
2.1
dB



Center 1.88 GHz Span 3 MHz

#Res BW 30 kHz #VBW 300 kHz Sweep 9.167 ms (401 pts)

Occupied Bandwidth Results (idle)

Occupied Bandwidth
1.251 MHz

Occ BW % Pwr 99.00 %

Transmit Freq Error 9.698 kHz

Freq/Channel

Center Freq
1.88000000 GHz

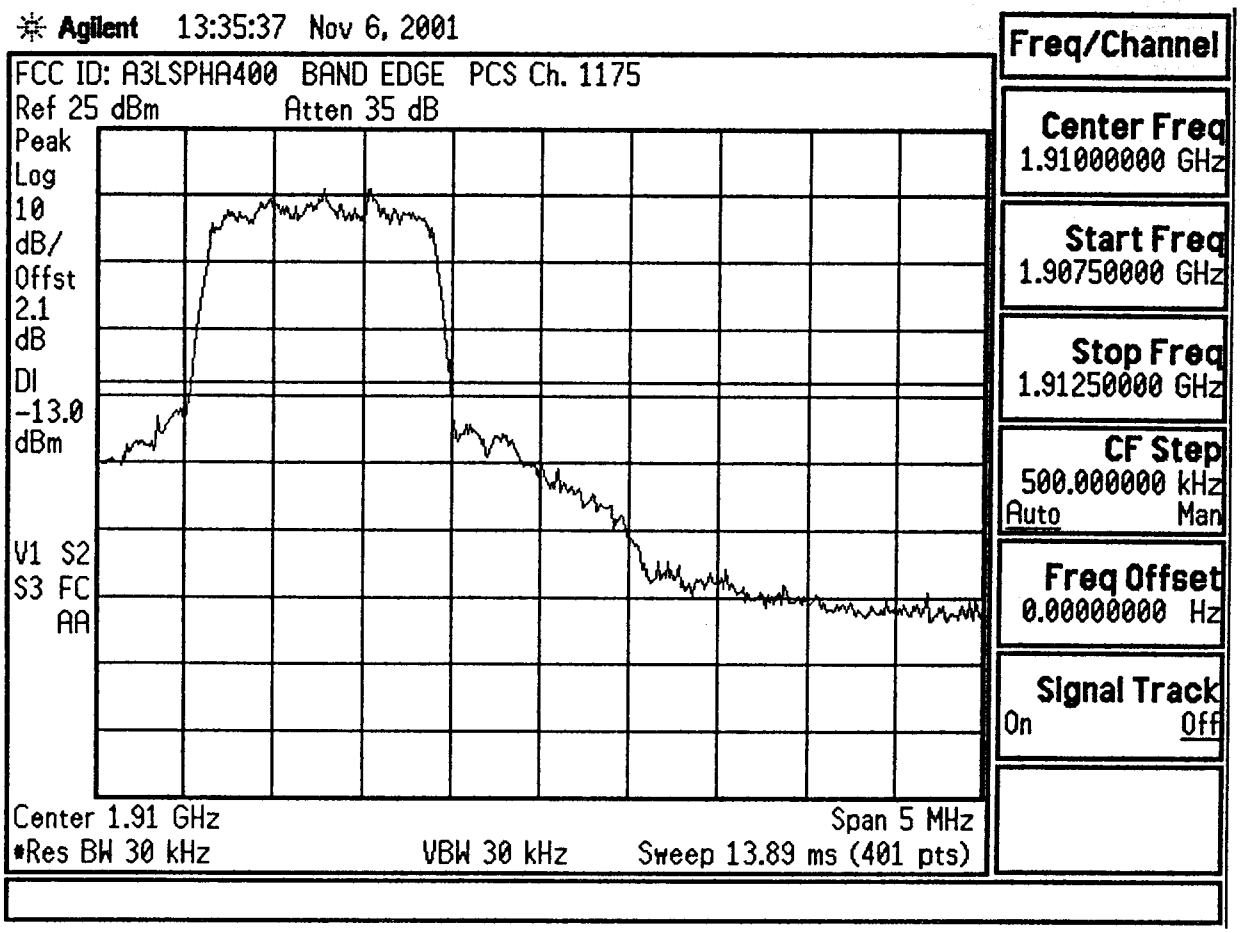
Start Freq
1.87850000 GHz

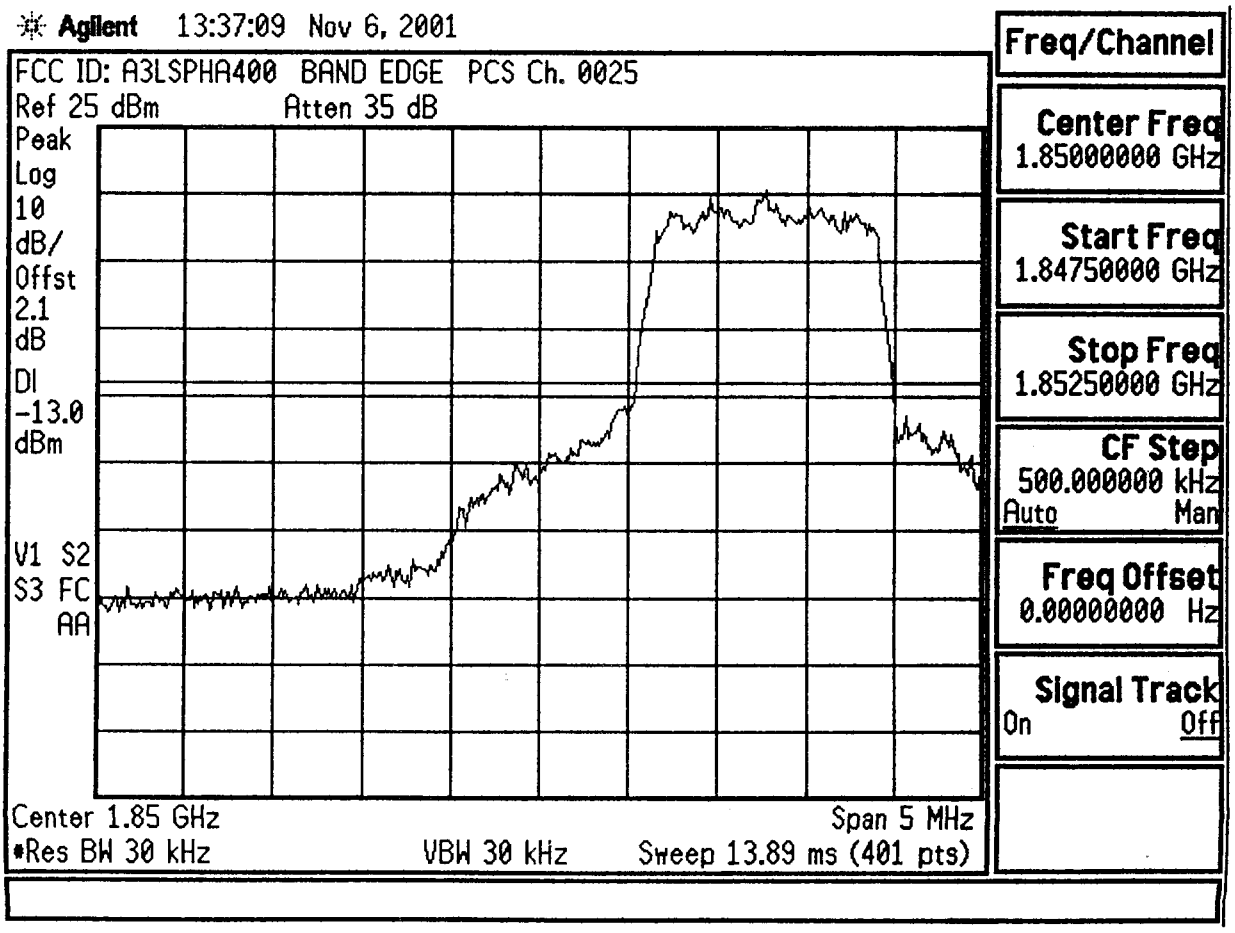
Stop Freq
1.88150000 GHz

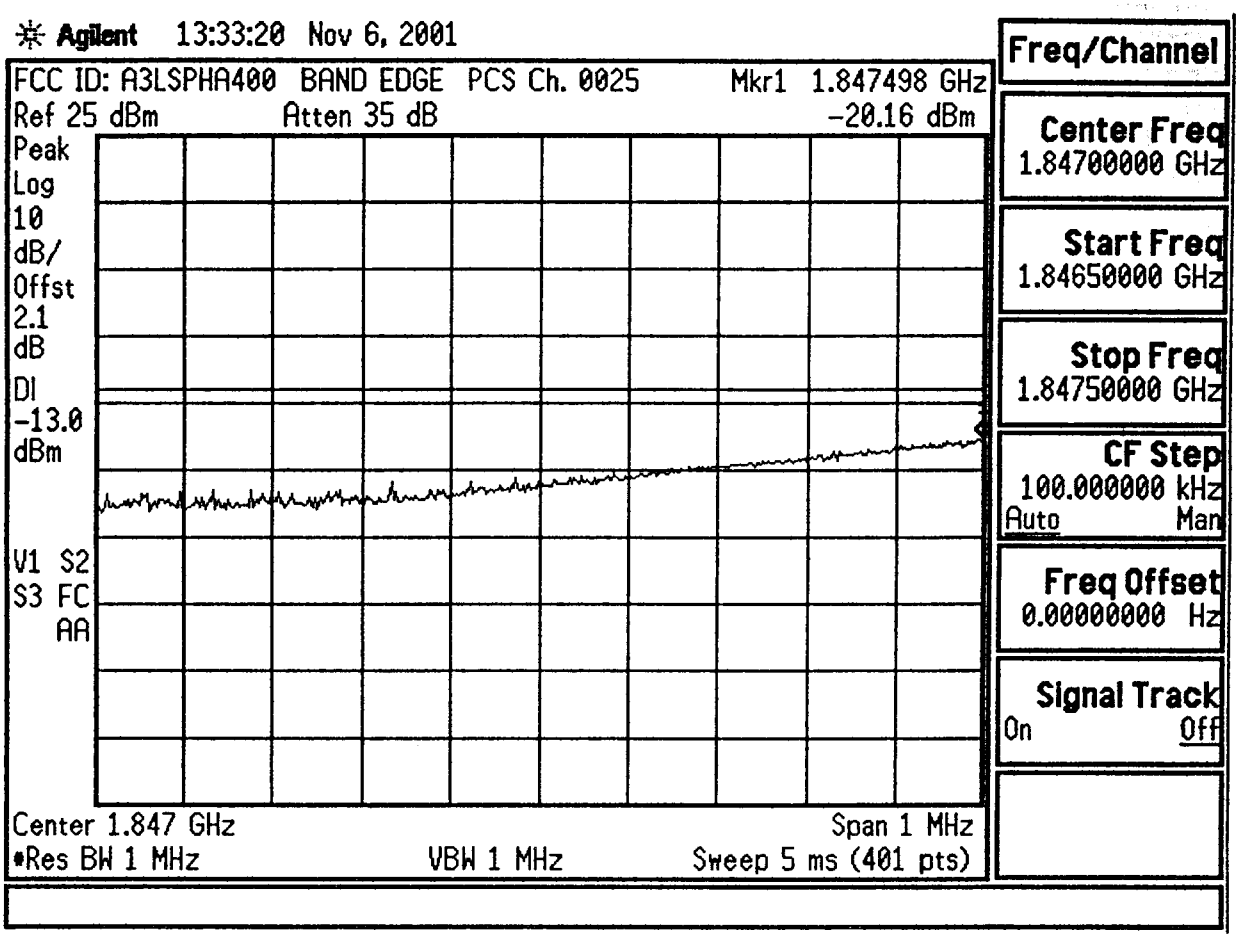
CF Step
300.000000 kHz
Auto Man

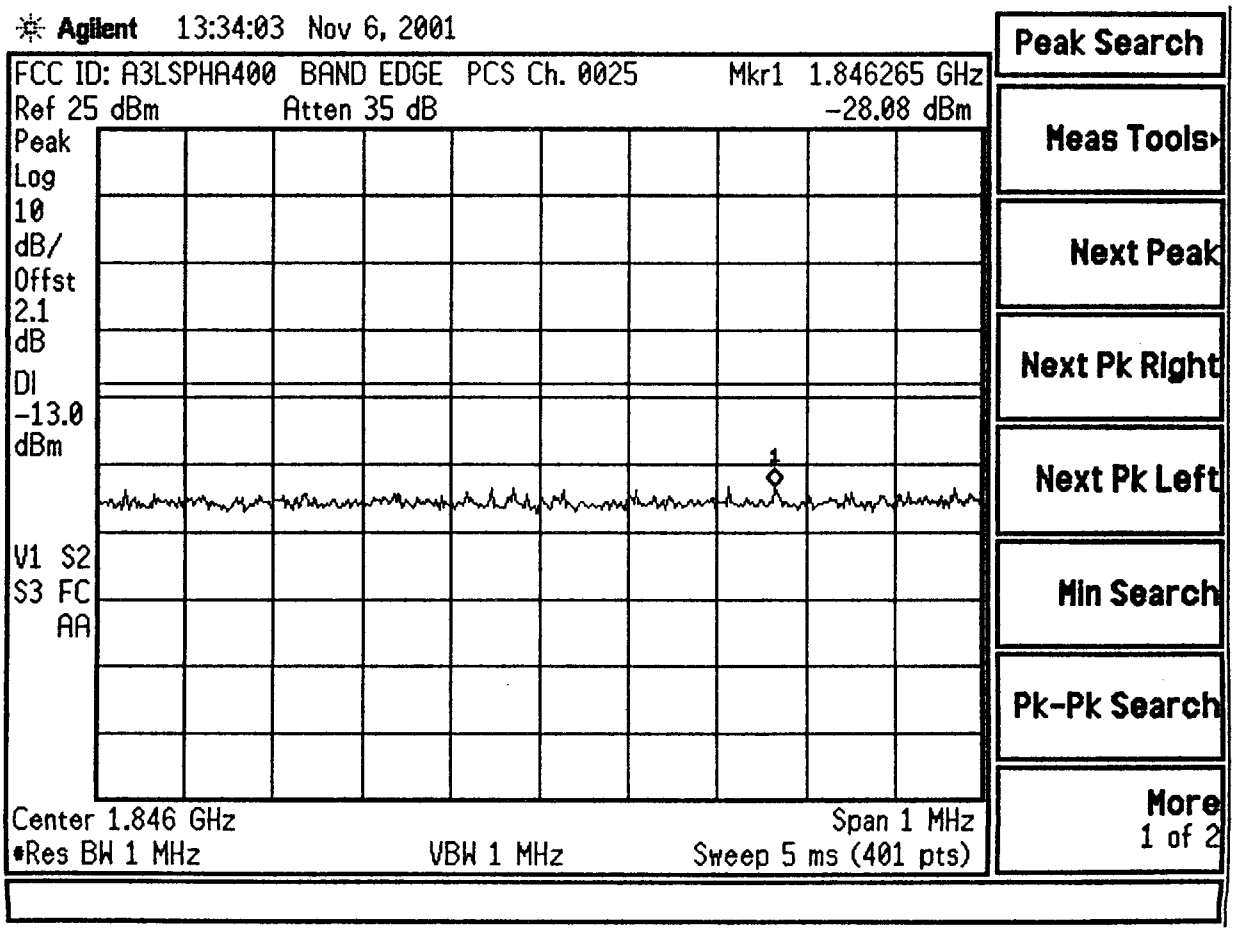
Freq Offset
0.00000000 Hz

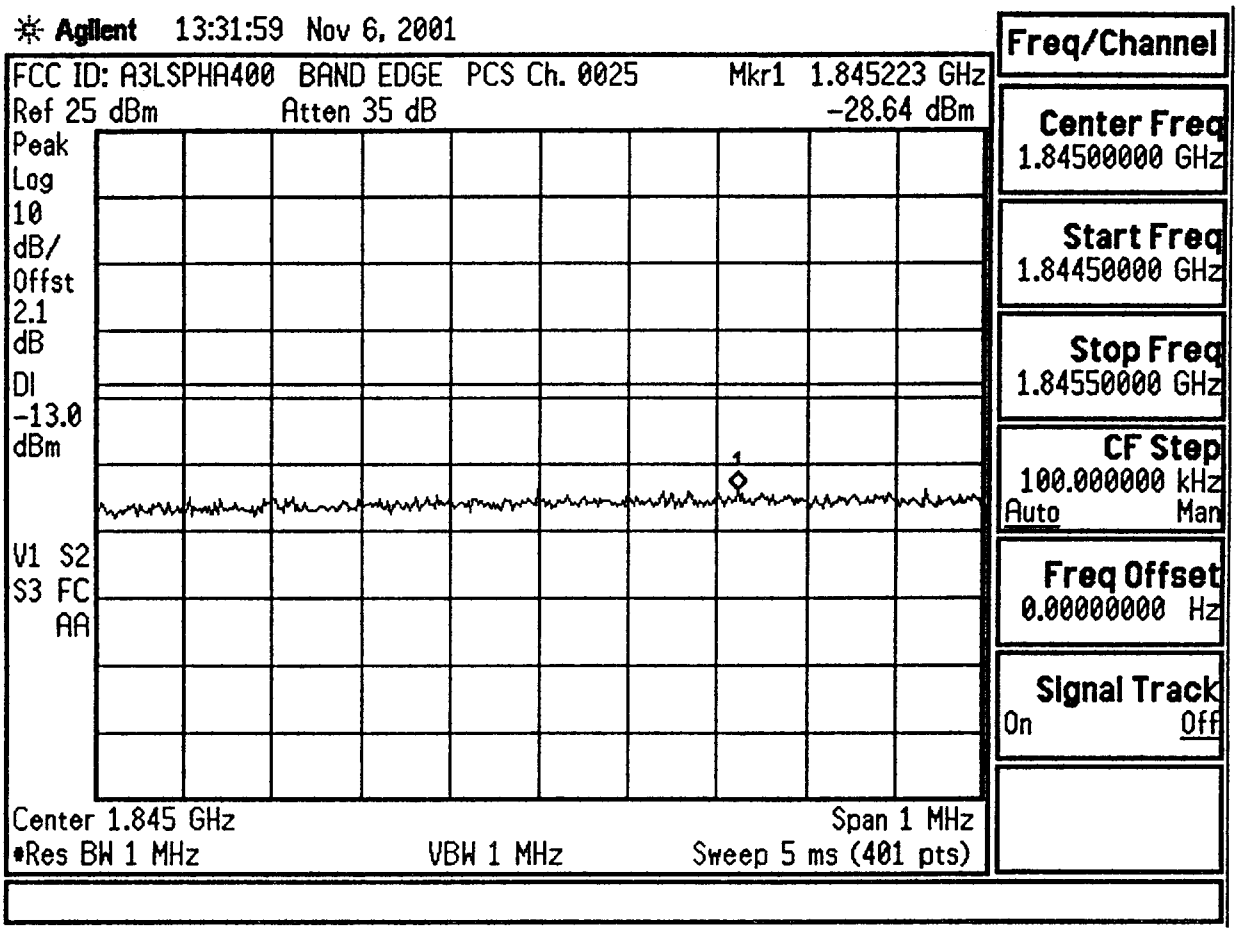
Signal Track
On Off

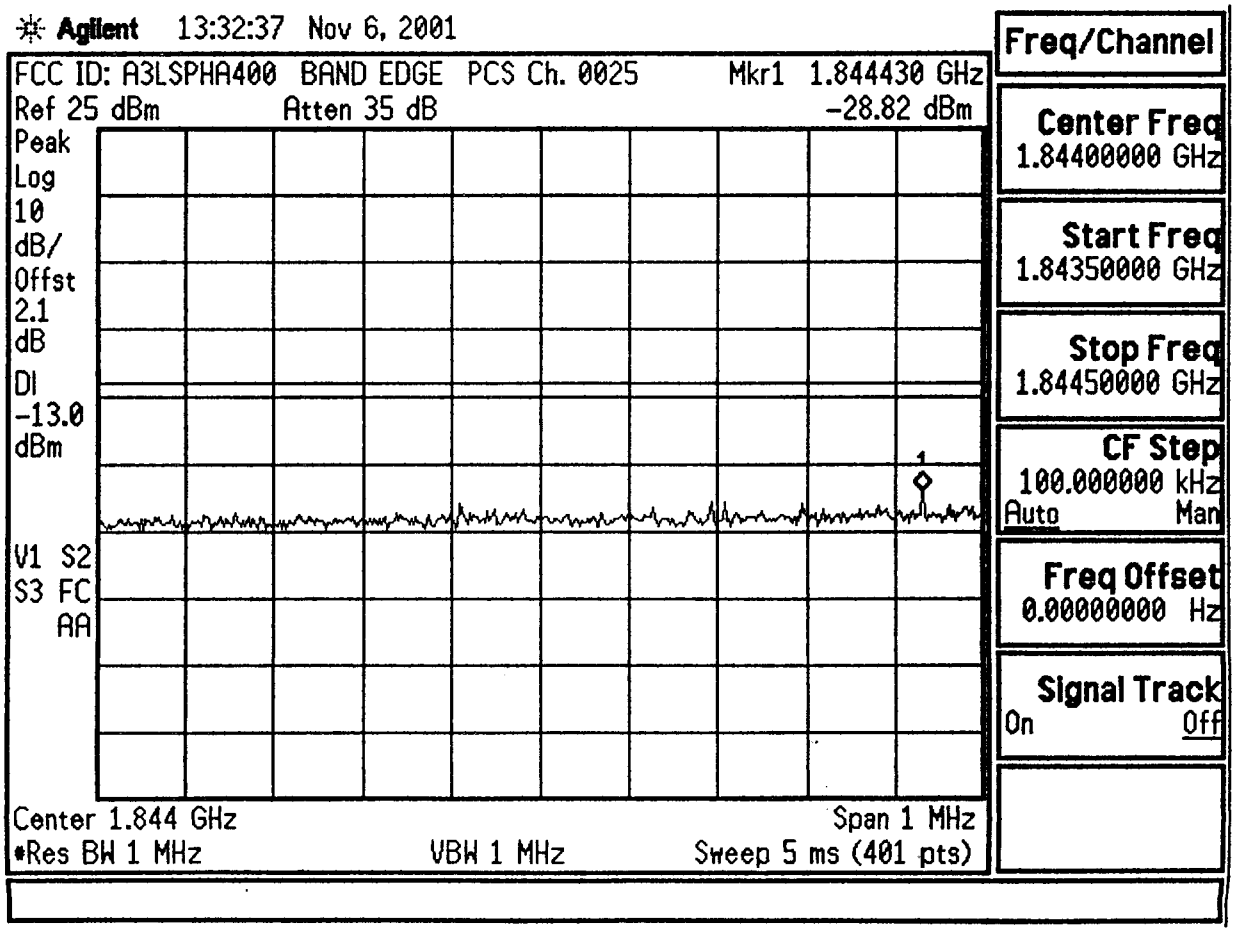

Agilent 13:35:37 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 1175
Ref 25 dBm Atten 35 dB
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.91 GHz
Span 5 MHz
#Res BW 30 kHz
VBW 30 kHz
Sweep 13.89 ms (401 pts)
Freq/Channel
Center Freq
1.91000000 GHz
Start Freq
1.90750000 GHz
Stop Freq
1.91250000 GHz
CF Step
500.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

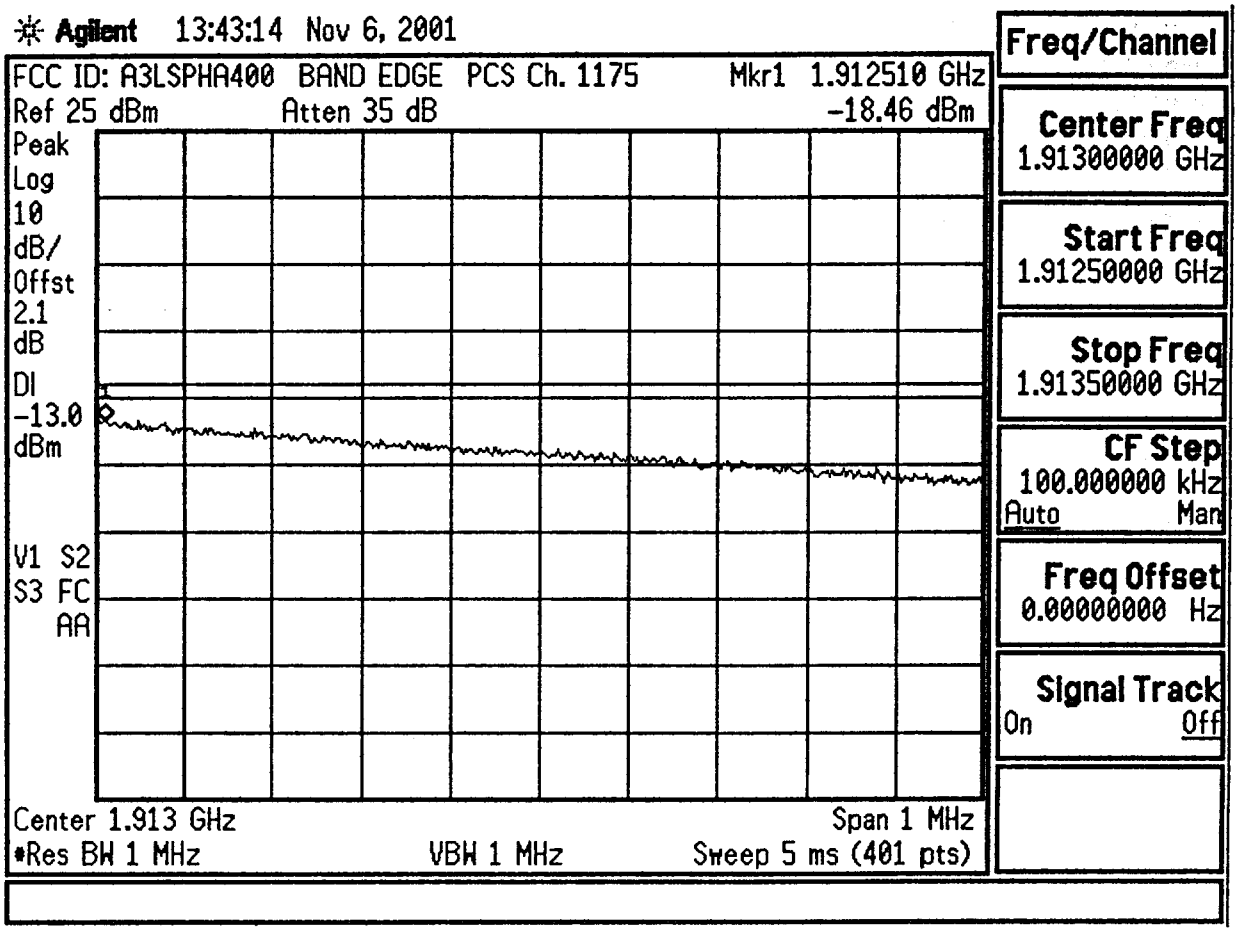

Agilent 13:37:09 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 0025
Ref 25 dBm Atten 35 dB
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.85 GHz
Span 5 MHz
#Res BW 30 kHz
VBW 30 kHz
Sweep 13.89 ms (401 pts)
Freq/Channel
Center Freq
1.85000000 GHz
Start Freq
1.84750000 GHz
Stop Freq
1.85250000 GHz
CF Step
500.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

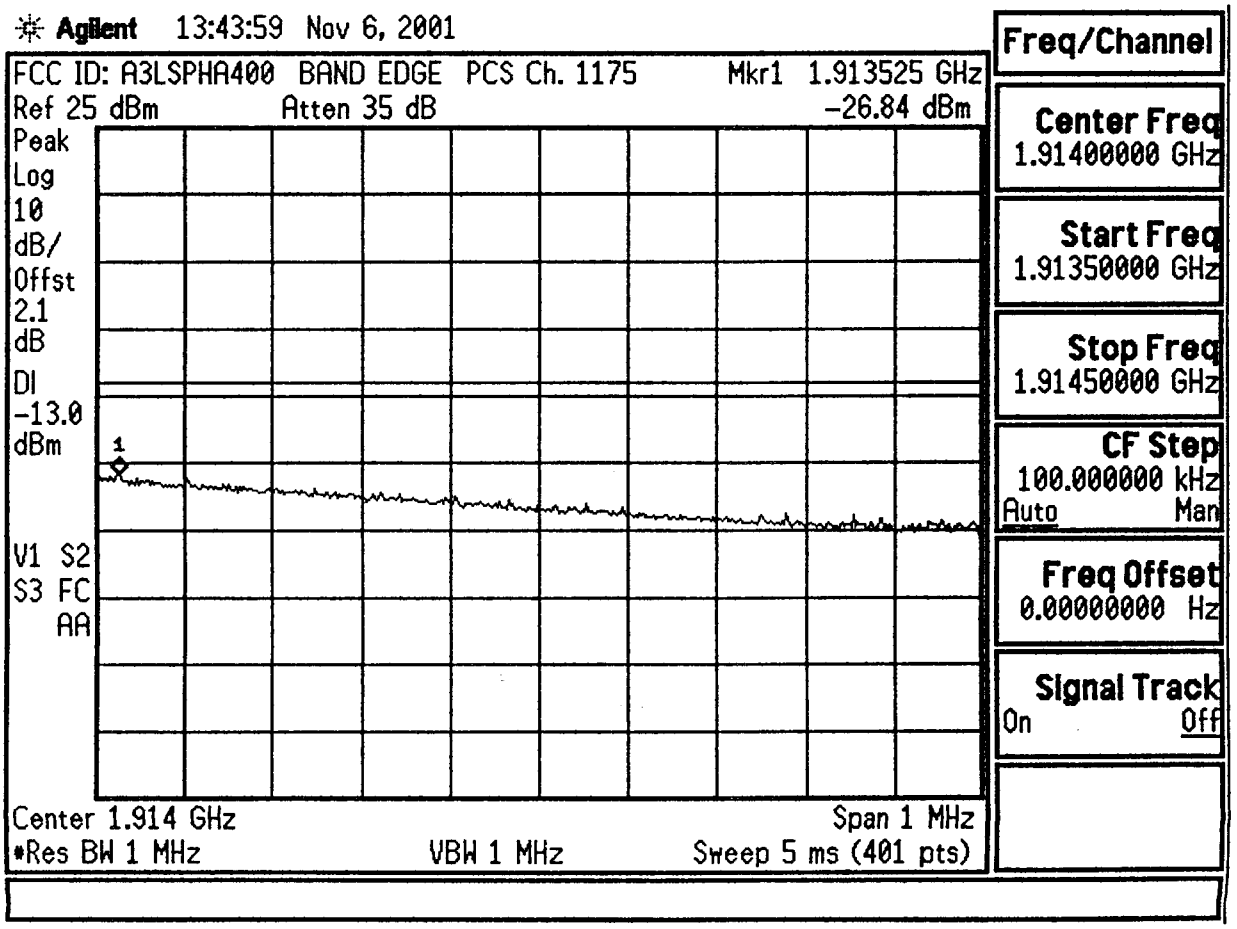

Agilent 13:33:20 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 0025
Mkr1 1.847498 GHz
Ref 25 dBm
Atten 35 dB
-20.16 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.847 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.84700000 GHz
Start Freq
1.84650000 GHz
Stop Freq
1.84750000 GHz
CF Step
100.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

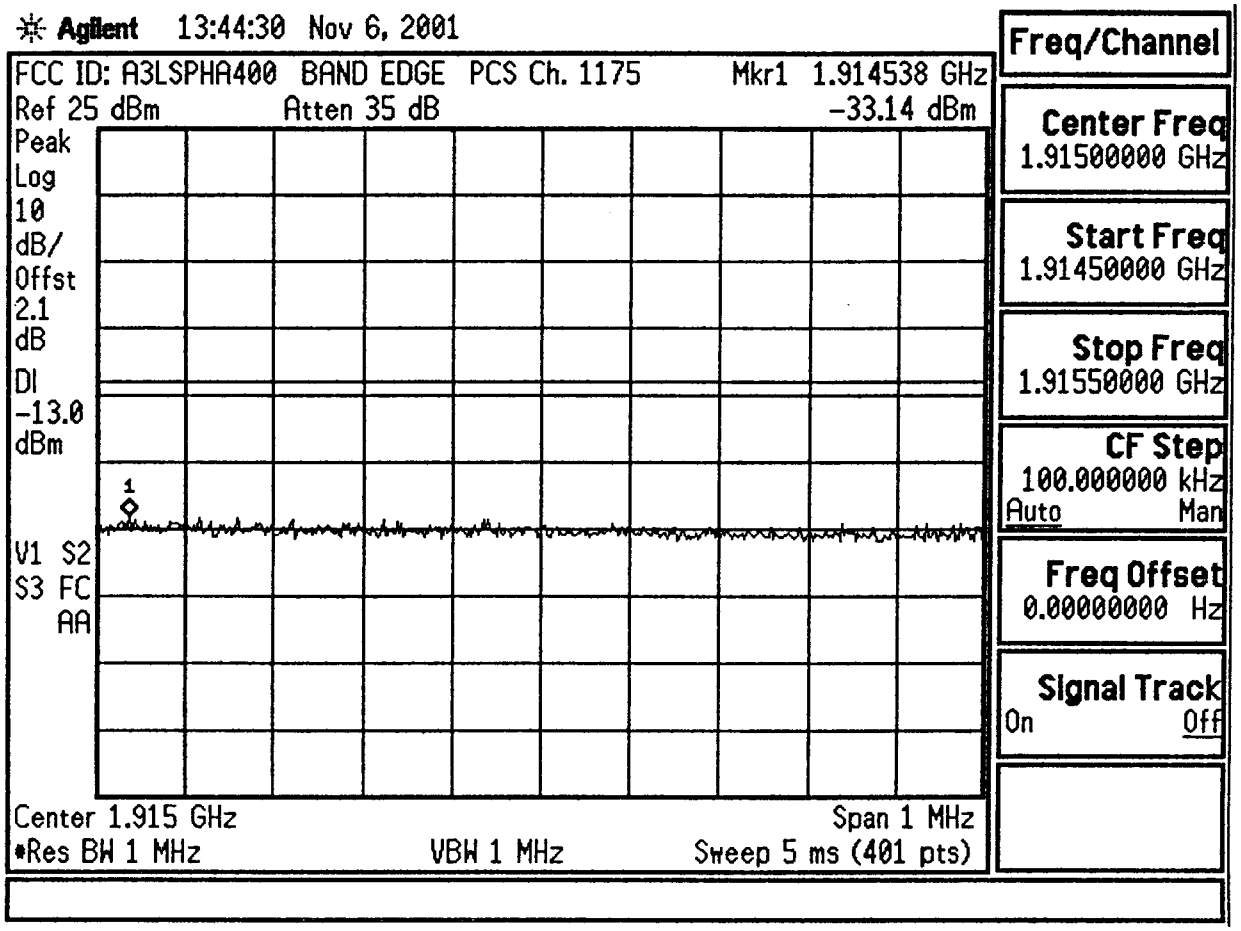

Agilent 13:34:03 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 0025
Mkr1 1.846265 GHz
Ref 25 dBm
Atten 35 dB
-28.08 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Center 1.846 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

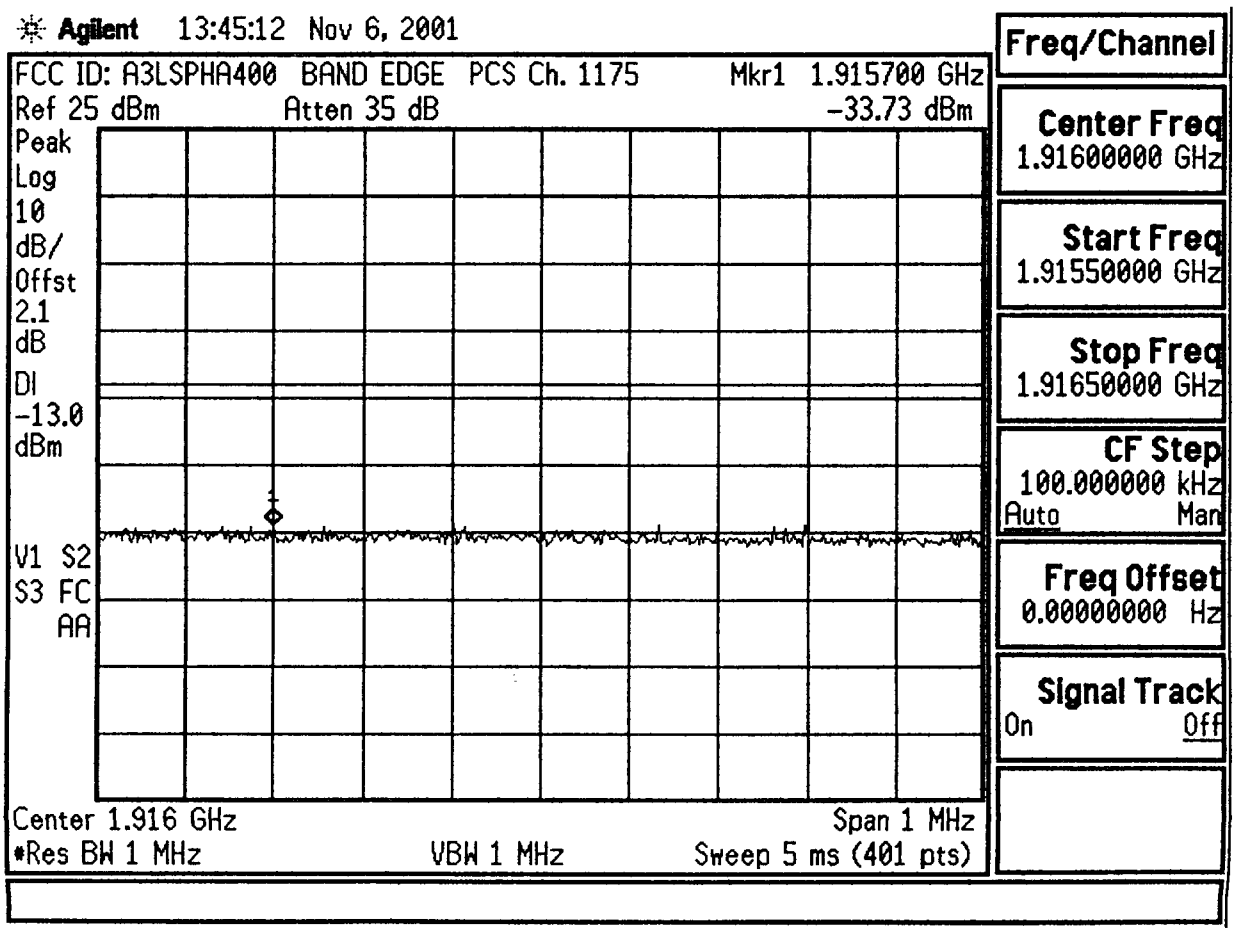

Agilent 13:31:59 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 0025
Mkr1 1.845223 GHz
Ref 25 dBm
Atten 35 dB
-28.64 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.845 GHz
Span 1 MHz
*Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.84500000 GHz
Start Freq
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 13:32:37 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 0025
Mkr1 1.844430 GHz
Ref 25 dBm
Atten 35 dB
-28.82 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.844 GHz
Span 1 MHz
*Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
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 13:43:14 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 1175
Mkr1 1.912510 GHz
Ref 25 dBm
Atten 35 dB
-18.46 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.913 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
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 13:43:59 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 1175
Mkr1 1.913525 GHz
Ref 25 dBm
Atten 35 dB
-26.84 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.914 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
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 13:44:30 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 1175
Mkr1 1.914538 GHz
Ref 25 dBm
Atten 35 dB
-33.14 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.915 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
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

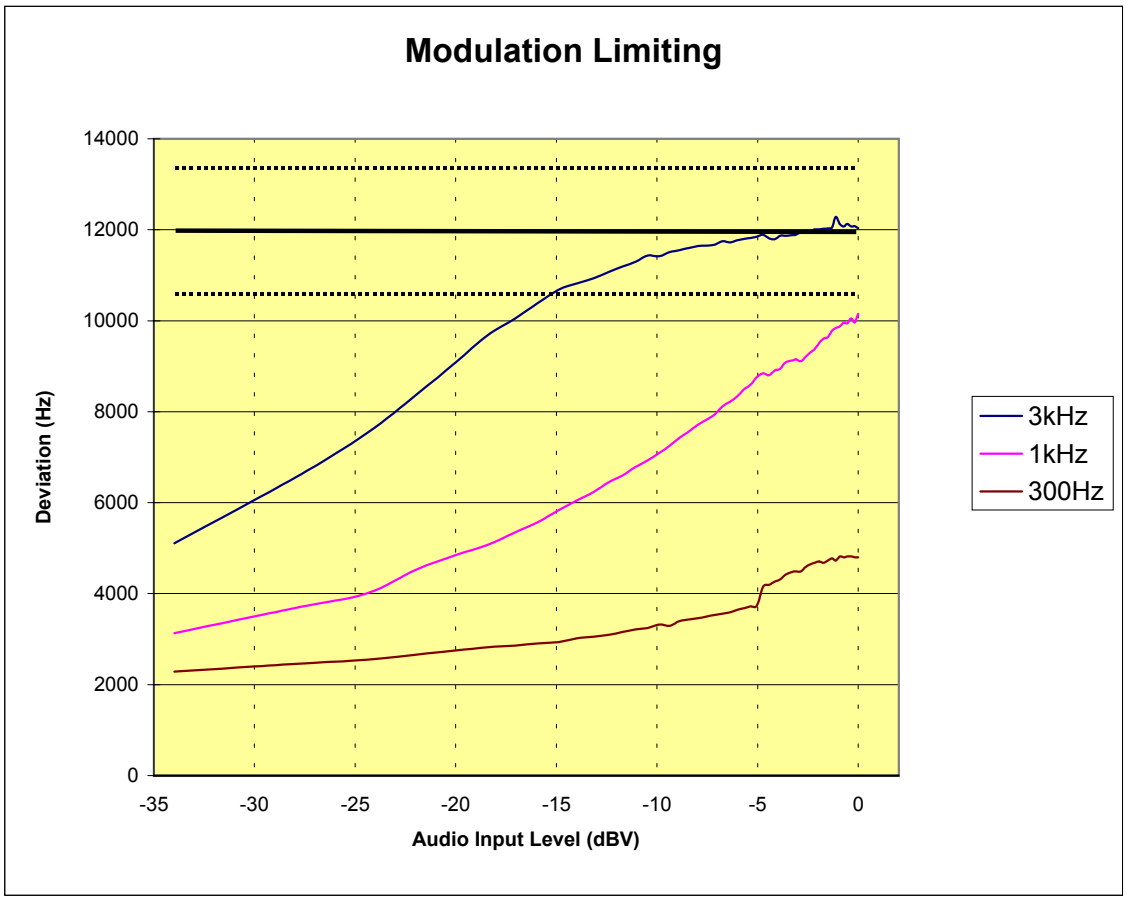

Agilent 13:45:12 Nov 6, 2001
FCC ID: A3LSPHA400 BAND EDGE PCS Ch. 1175
Mkr1 1.915700 GHz
Ref 25 dBm
Atten 35 dB
-33.73 dBm
Peak
Log
10
dB/
Offst
2.1
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Center 1.916 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.91600000 GHz
Start Freq
1.91550000 GHz
Stop Freq
1.91650000 GHz
CF Step
100.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off

SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 24/22.210926554.A3L
Test Date: 09.26.2001

EUT: SAMSUNG Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-A400*
FCC ID: **A3LSPHA400**

REFERENCE: 1 kHz = 0 dB

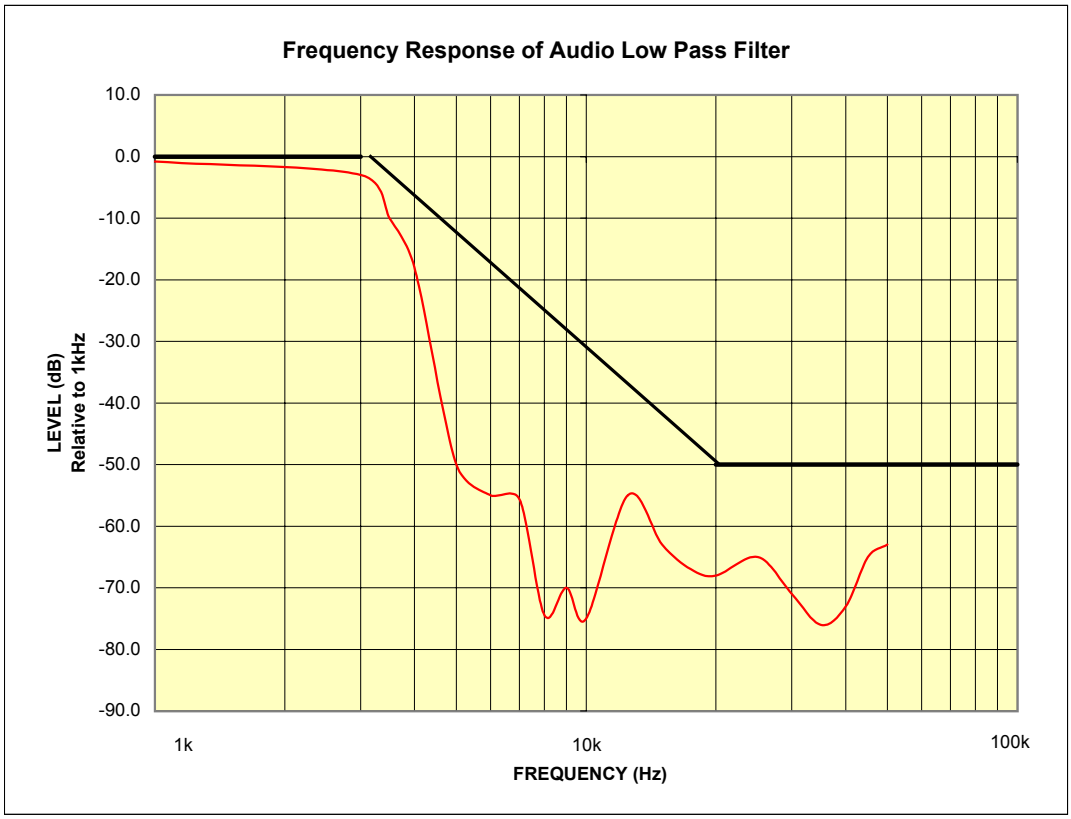


SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 24/22.210827519.A3L
Test Date: 09.12.2001

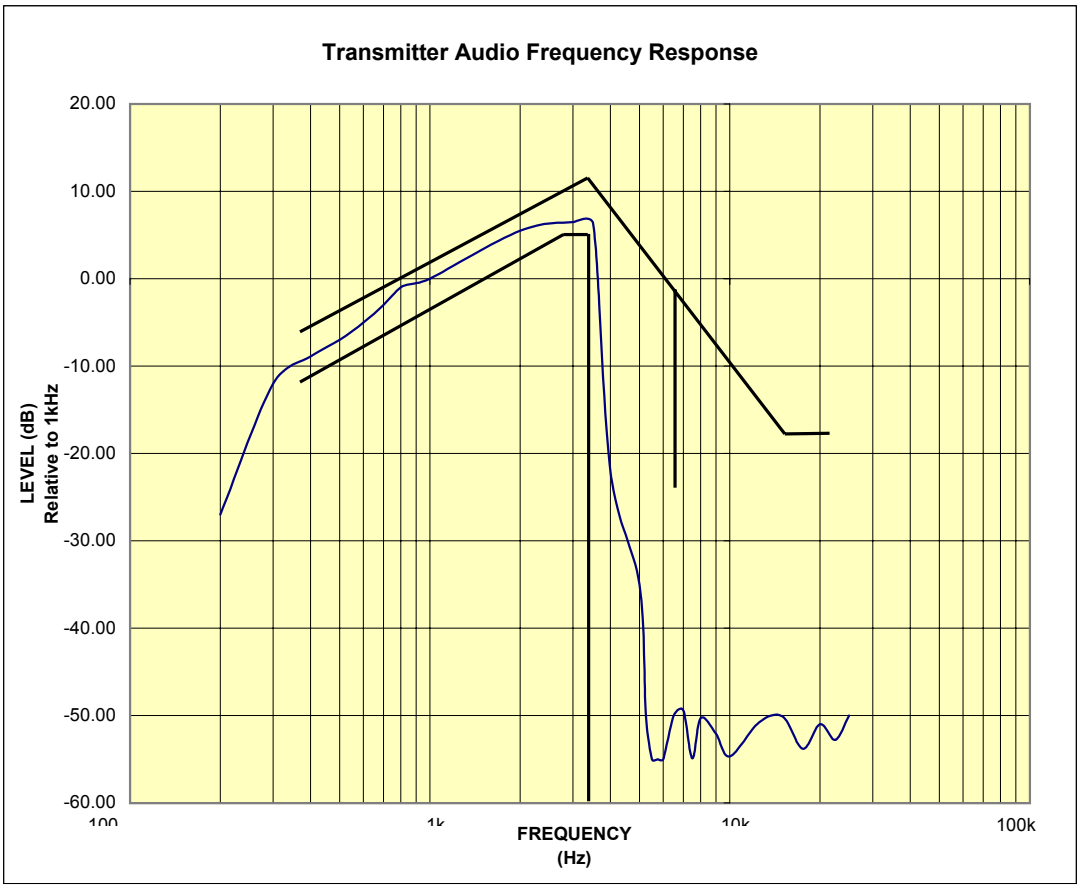
EUT: SAMSUNG Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-A400*
FCC ID: **A3LSPHA400**

REFERENCE: 1 kHz = 0 dB



SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 24/22.210827519.A3L
Test Date: 09.12.2001

EUT: SAMSUNG Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-A400*
FCC ID: **A3LSPHA400**

REFERENCE: 1 kHz = 0 dB