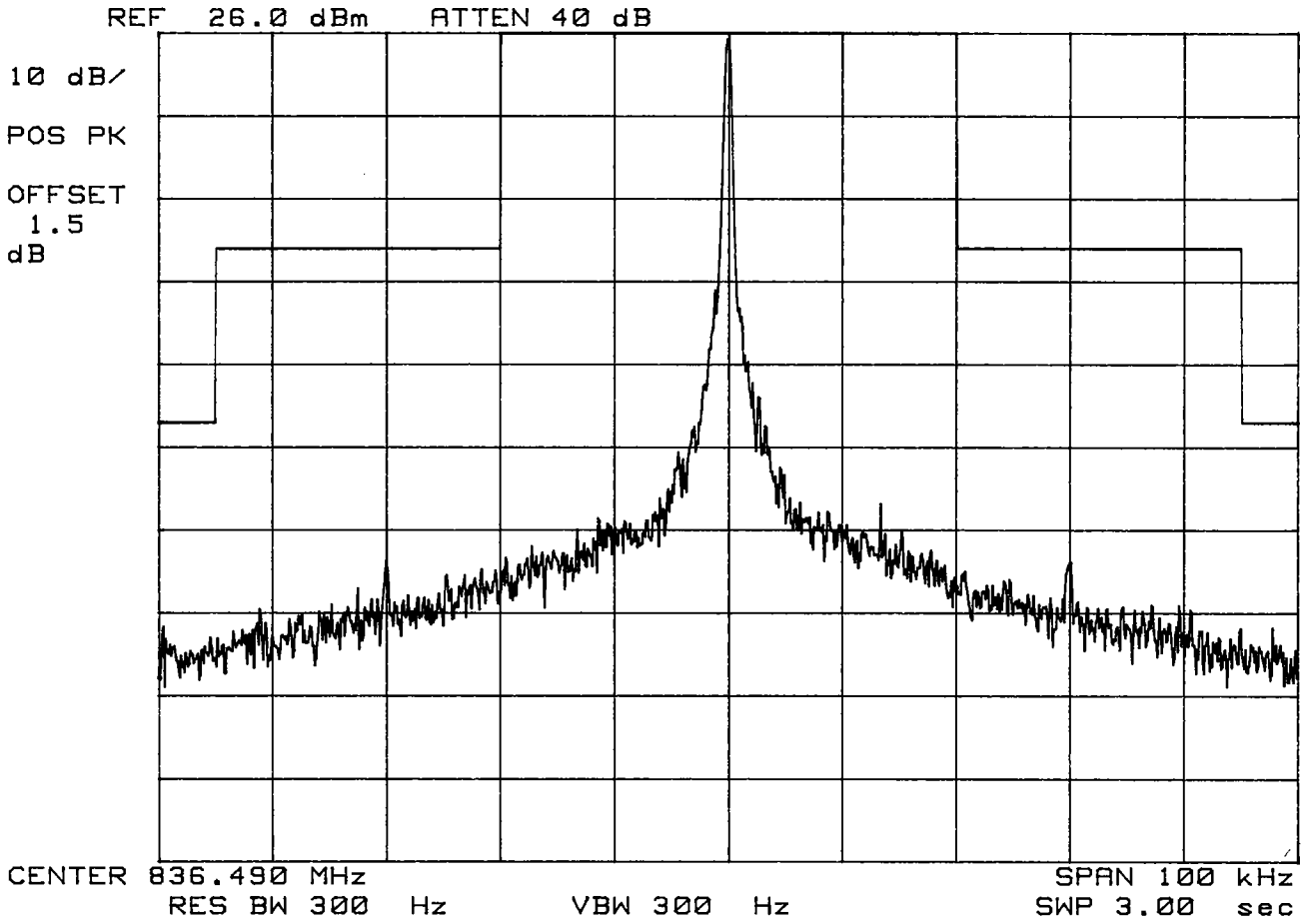
PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHN240
SAMSUNG
Dual-Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Unmodulated Signal

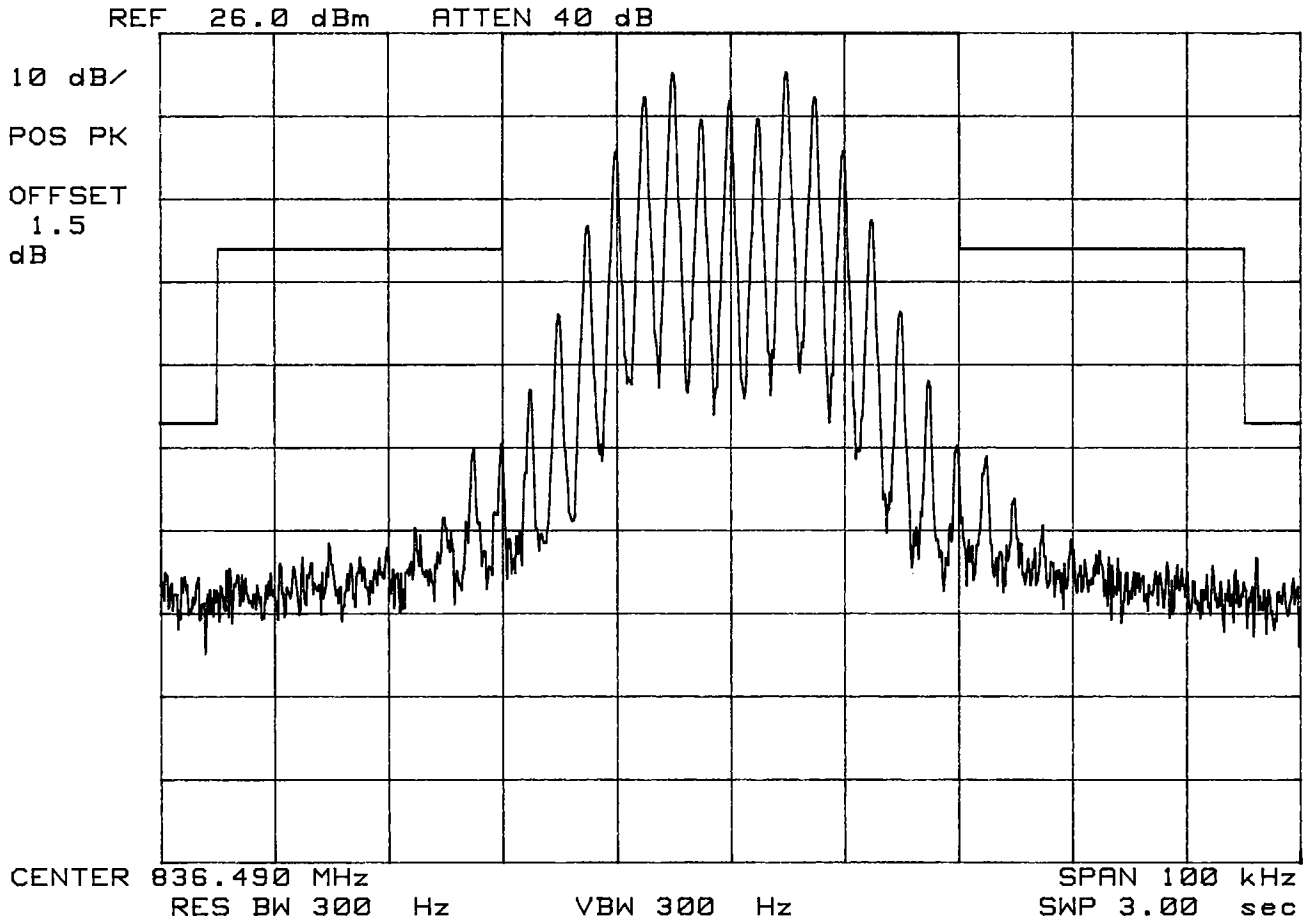


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHN240
SAMSUNG
Dual-Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Voice

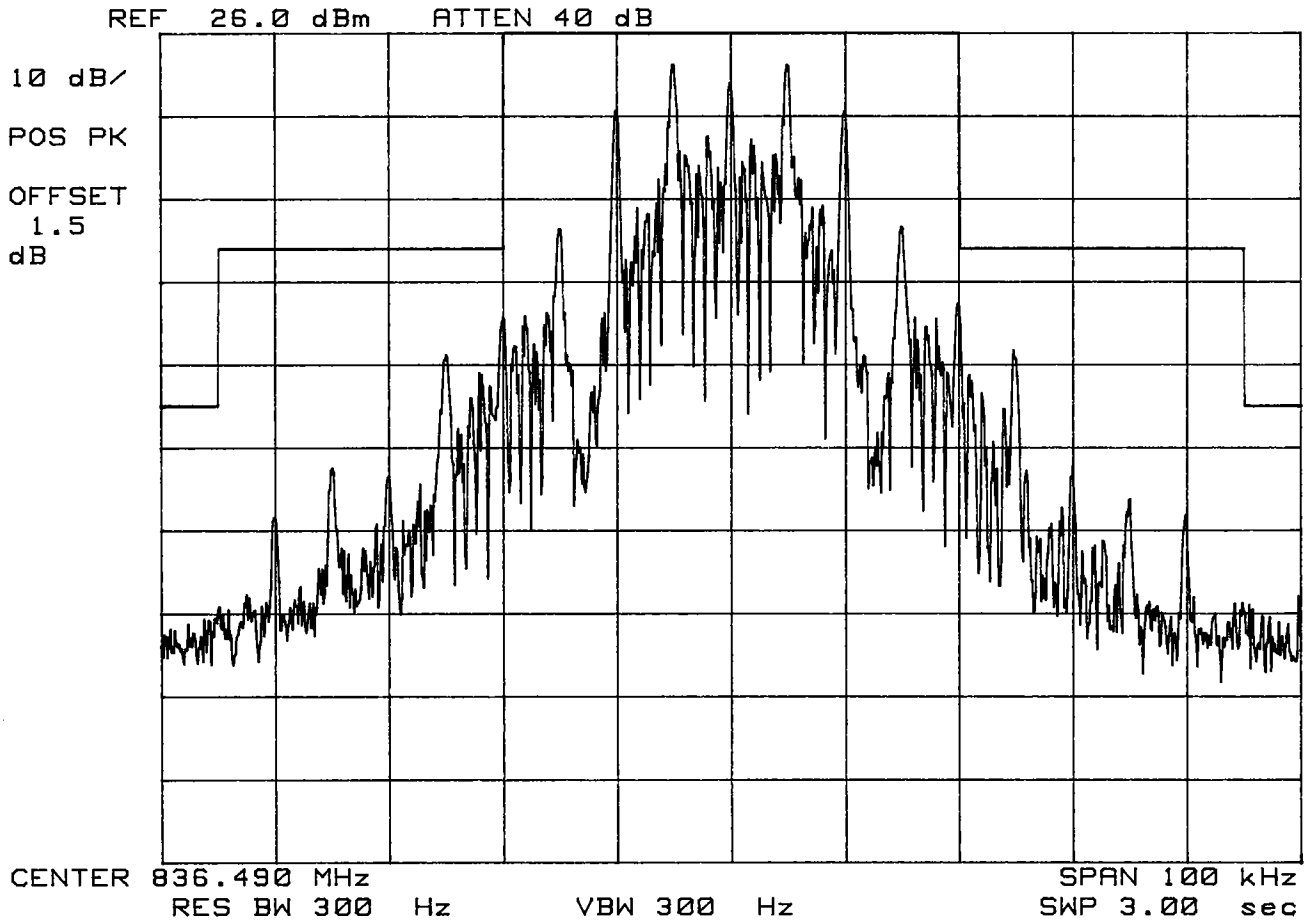


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHN240
SAMSUNG
Dual-Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Wide Band Data

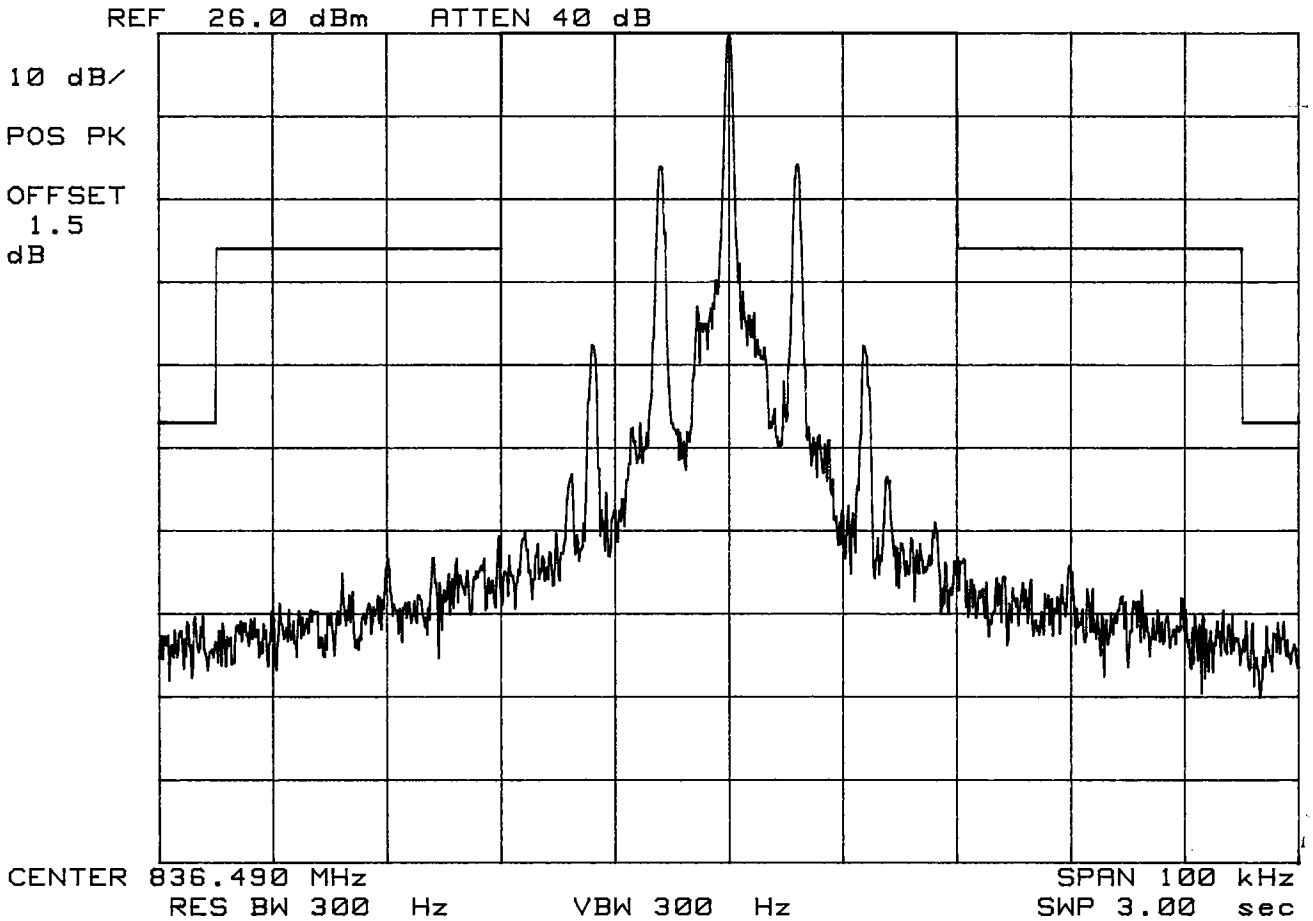


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHN240
SAMSUNG
Dual-Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:SAT

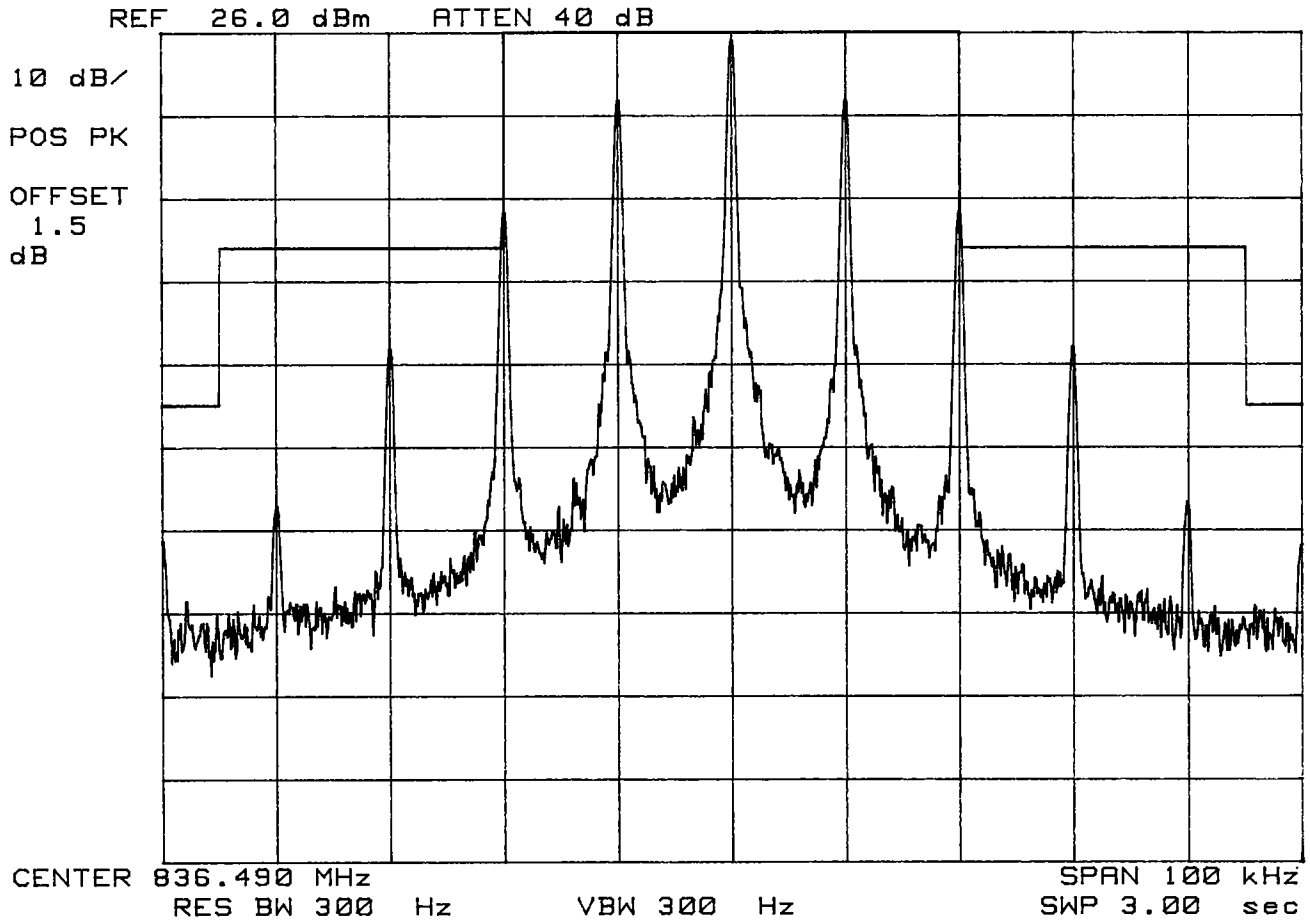


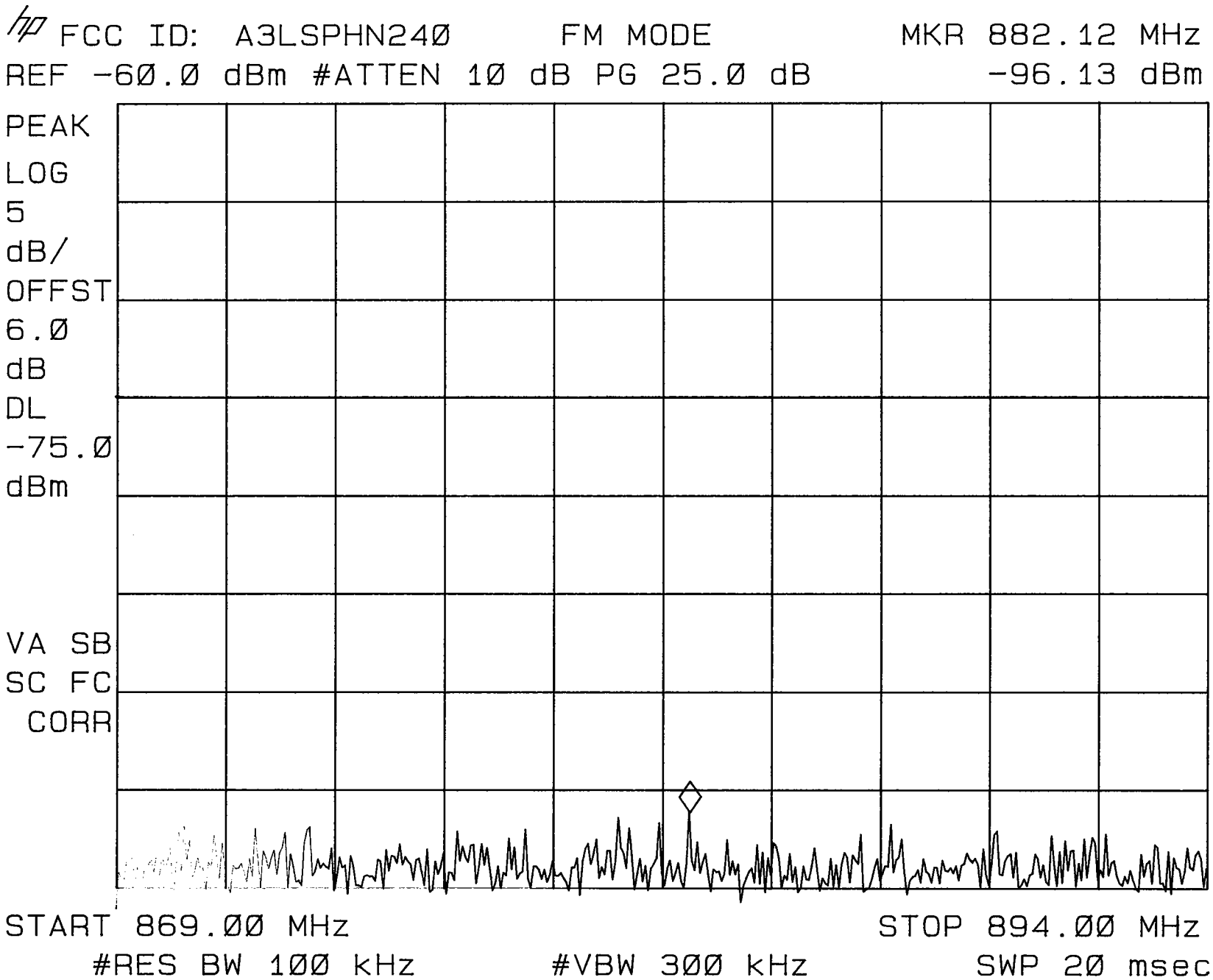
PCTEST Engineering Lab.

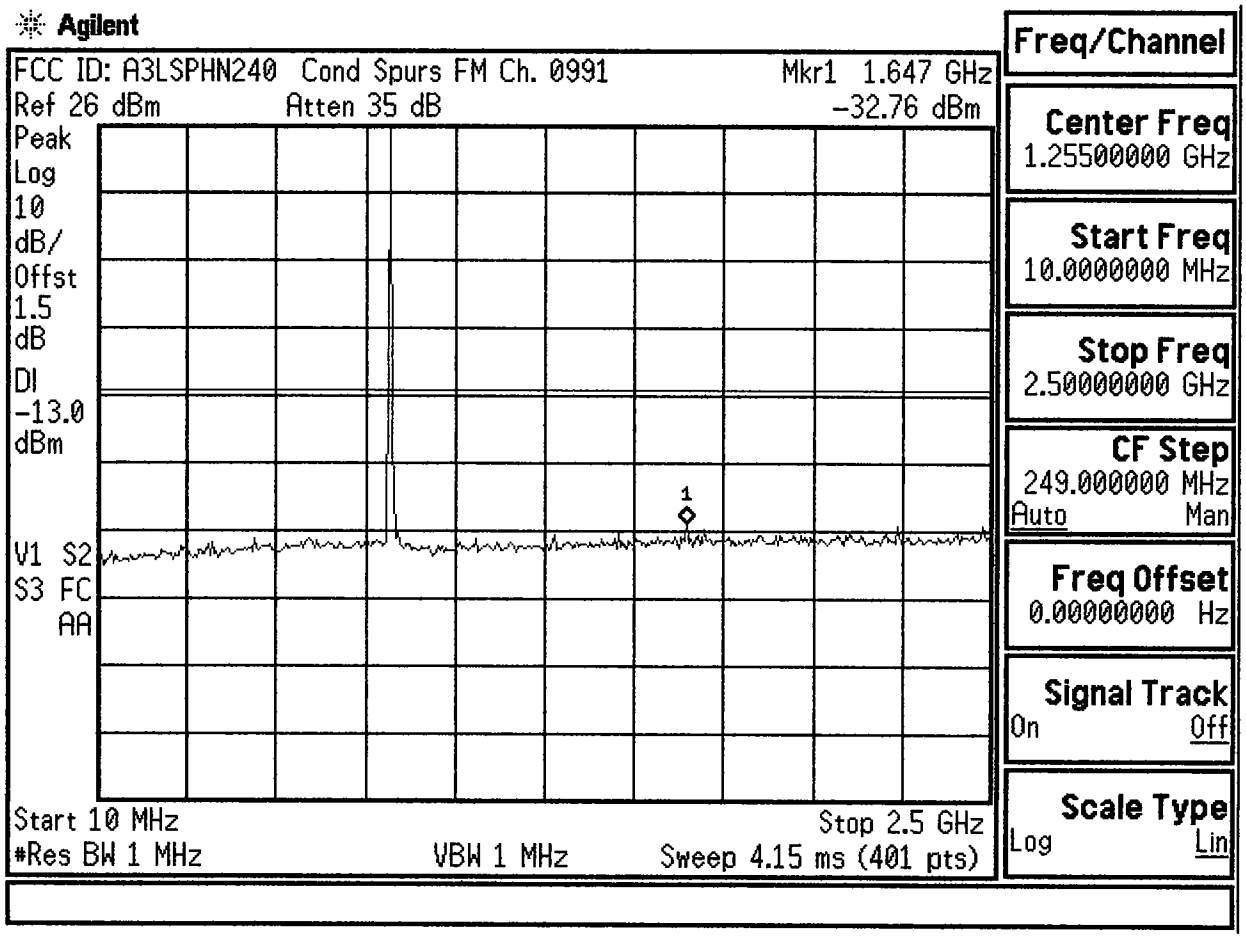
SPECTRUM ANALYZER PRESENTATION

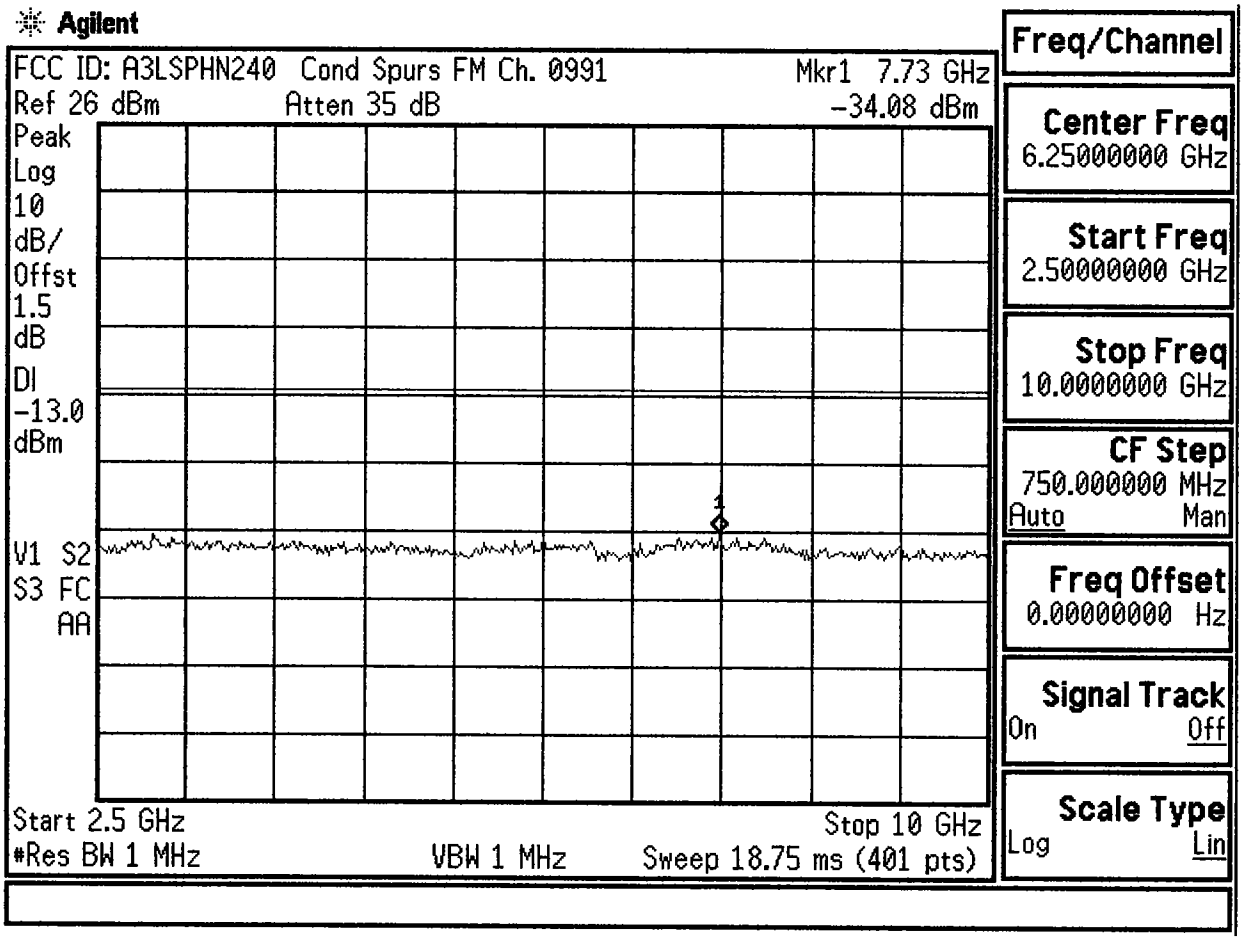
FCC ID:A3LSPHN240
SAMSUNG
Dual-Band Phone
FM Channel 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

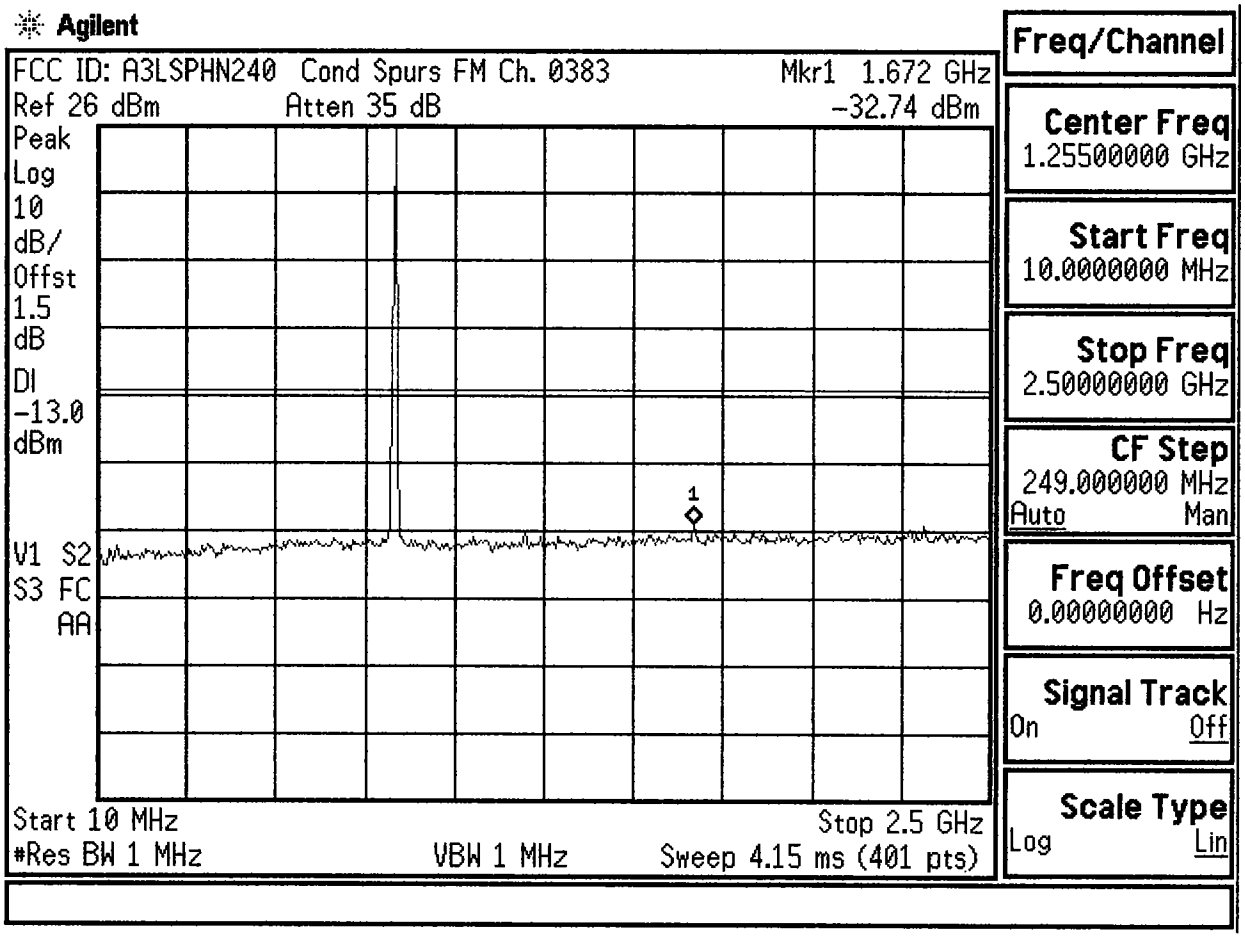
Test Mode:ST

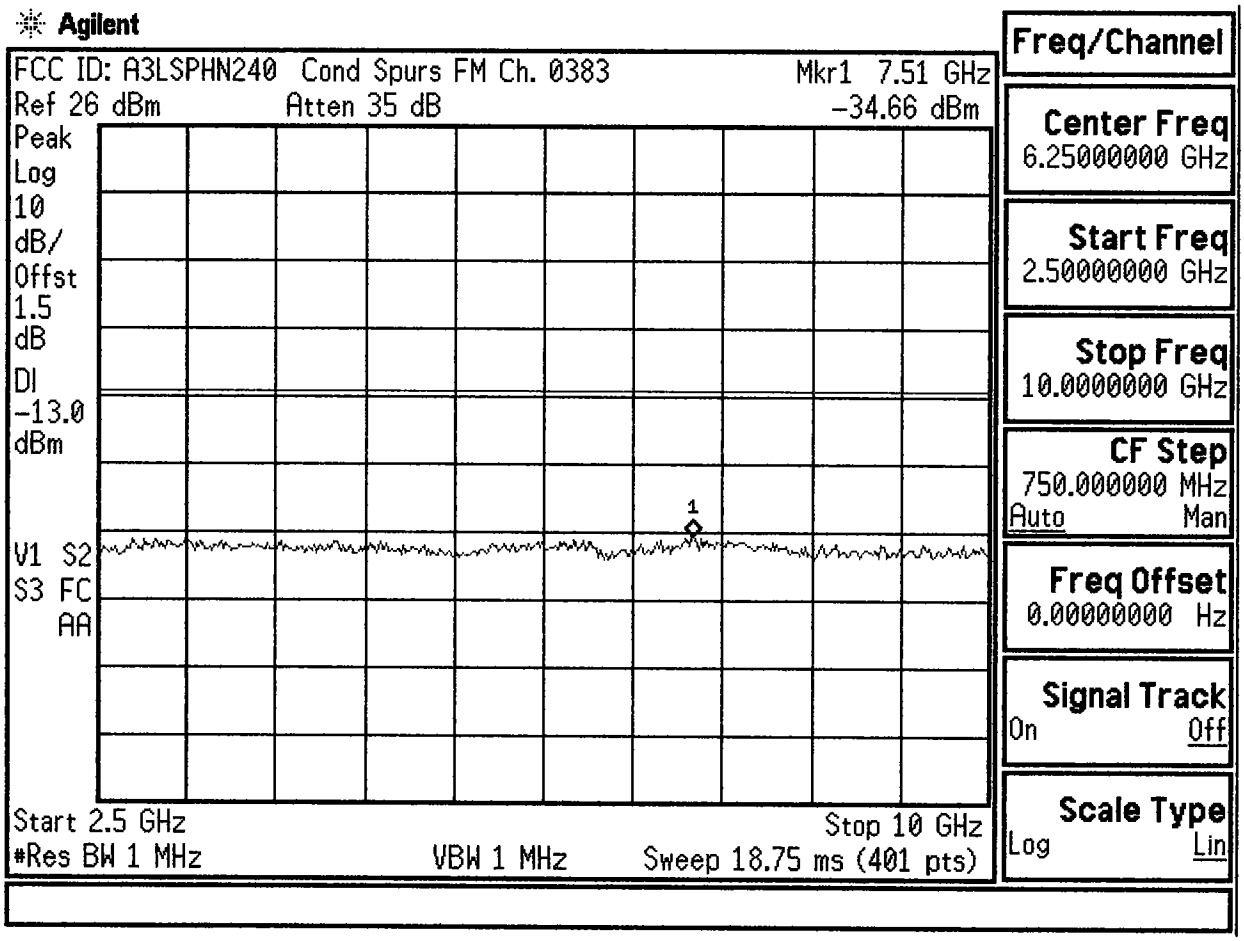


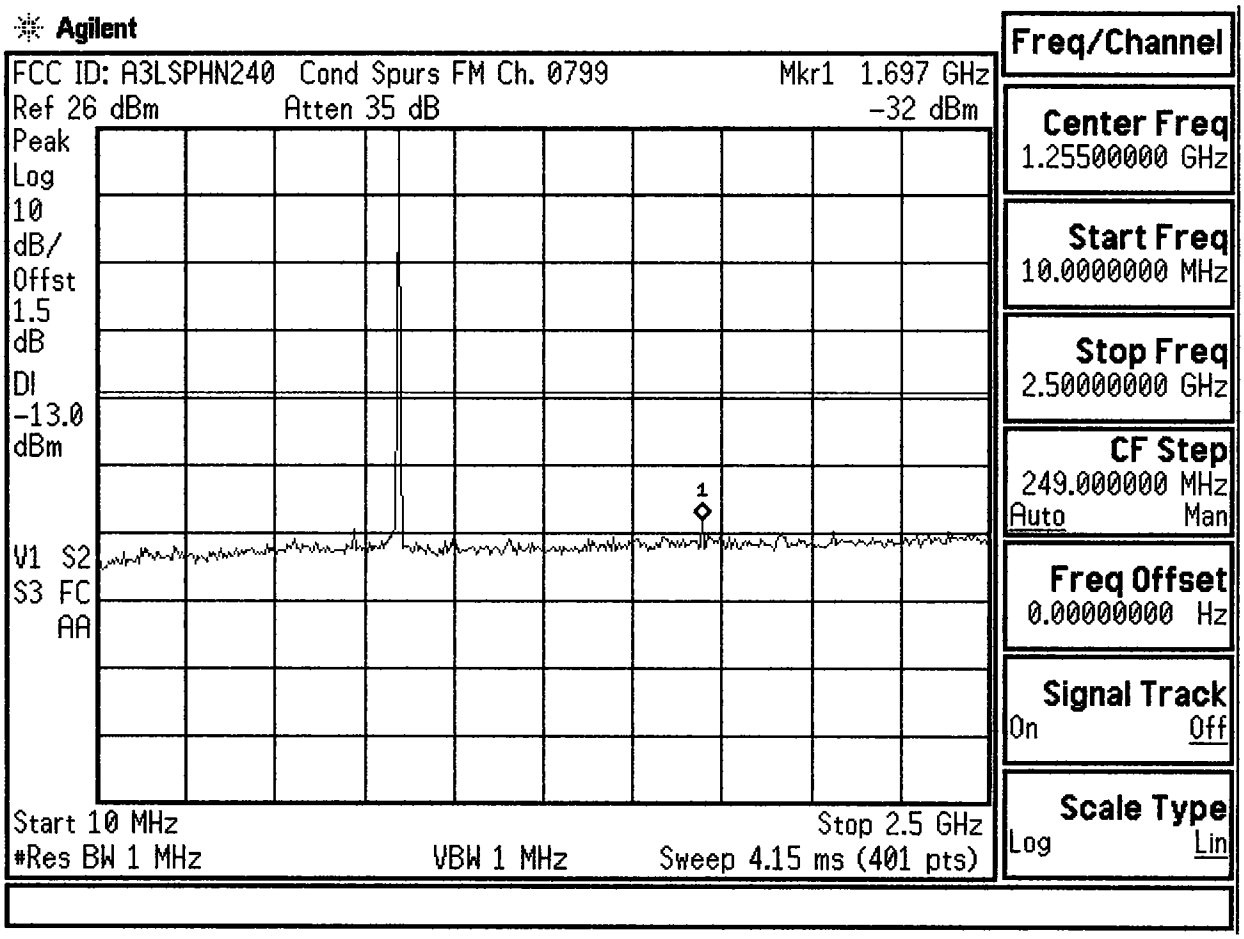

FCC ID: A3LSPHN240
FM MODE
MKR 882.12 MHz
REF -60.0 dBm #ATTEN 10 dB PG 25.0 dB
-96.13 dBm
PEAK
LOG
5
dB/
OFFST
6.0
dB
DL
-75.0
dBm
VA SB
SC FC
CORR
START 869.00 MHz
STOP 894.00 MHz
#RES BW 100 kHz
#VBW 300 kHz
SWP 20 msec

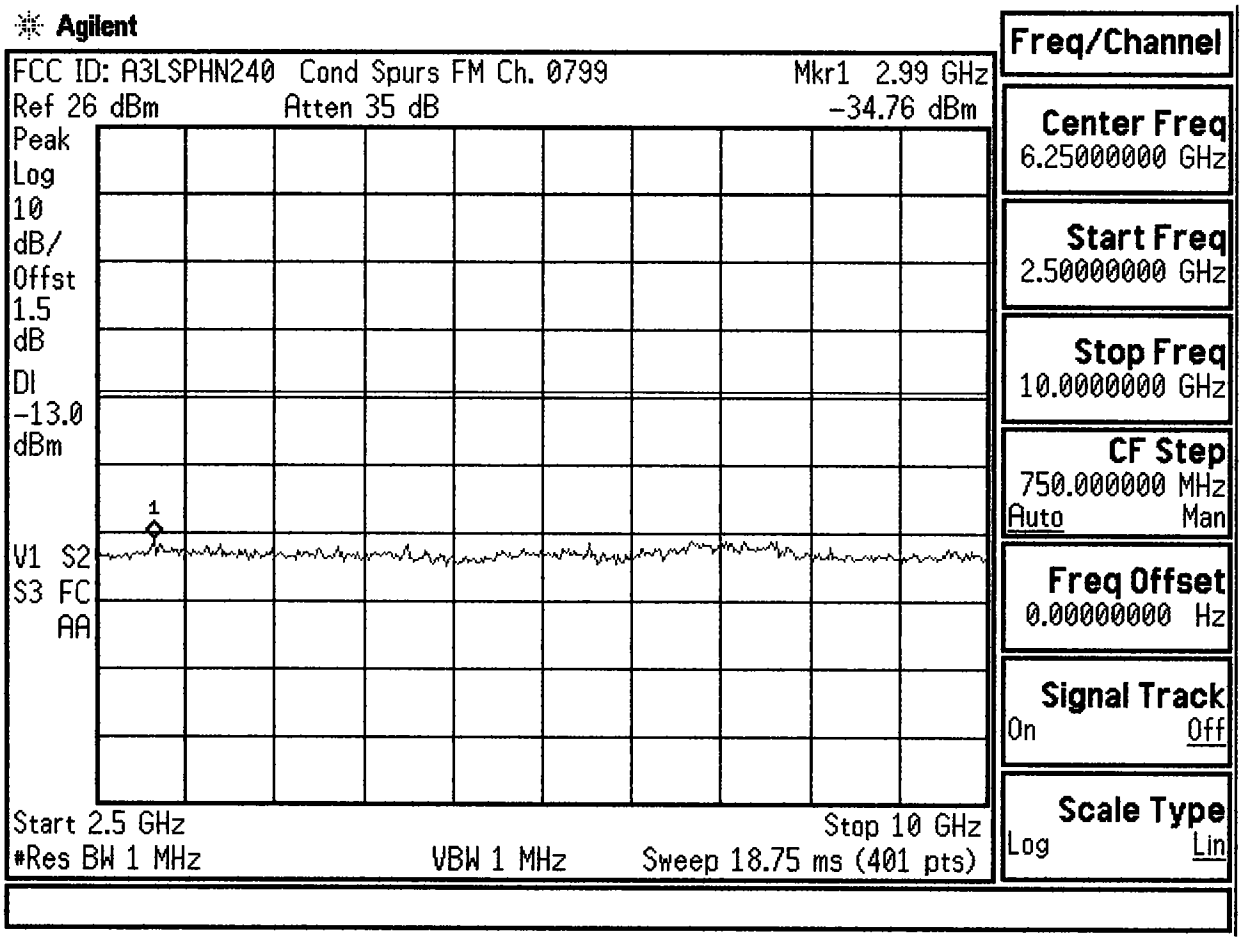

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0991
Mkr1 1.647 GHz
Ref 26 dBm
Atten 35 dB
-32.76 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

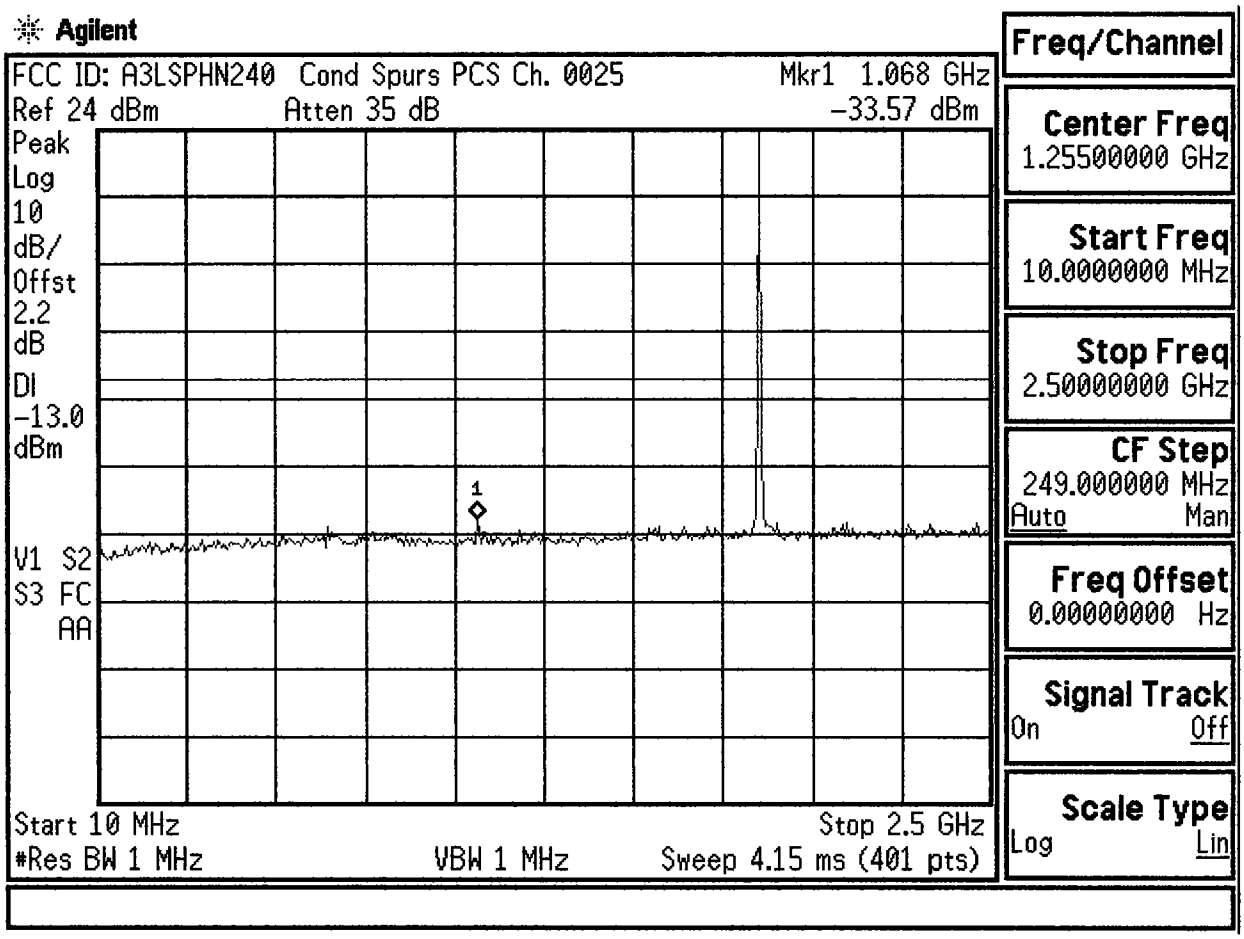

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0991
Mkr1 7.73 GHz
Ref 26 dBm
Atten 35 dB
-34.08 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

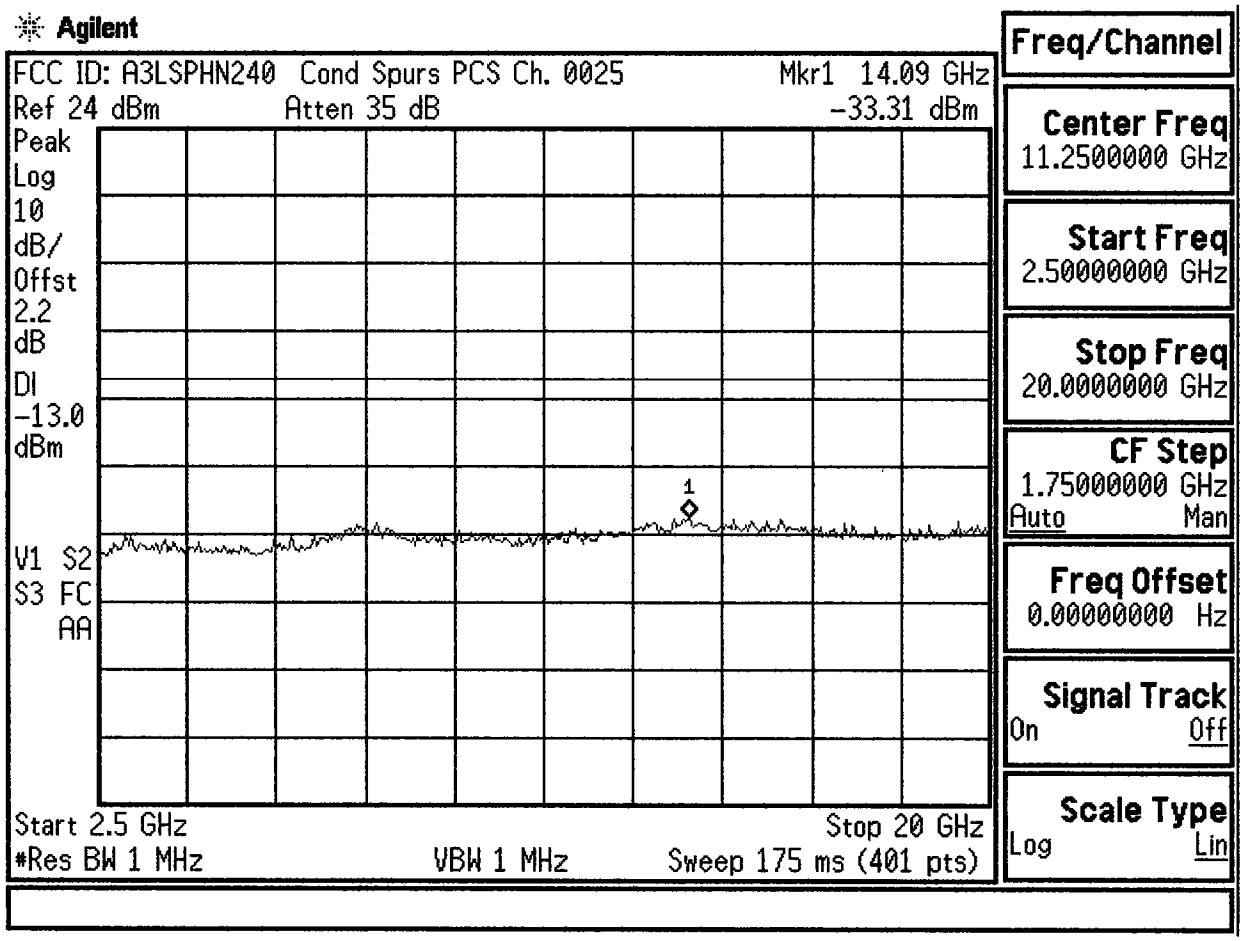

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0383
Mkr1 1.672 GHz
Ref 26 dBm
Atten 35 dB
-32.74 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

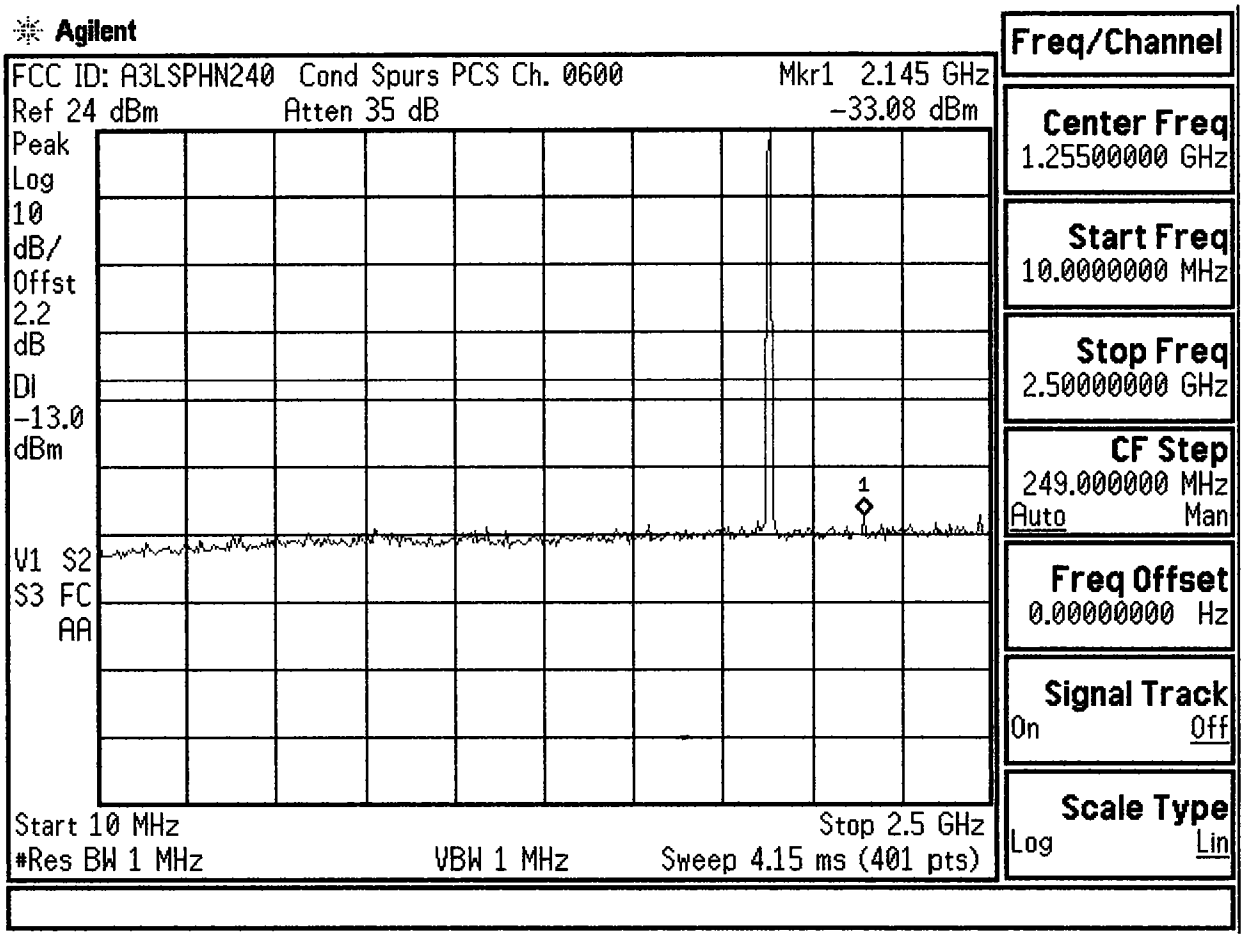

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0383
Mkr1 7.51 GHz
Ref 26 dBm
Atten 35 dB
-34.66 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

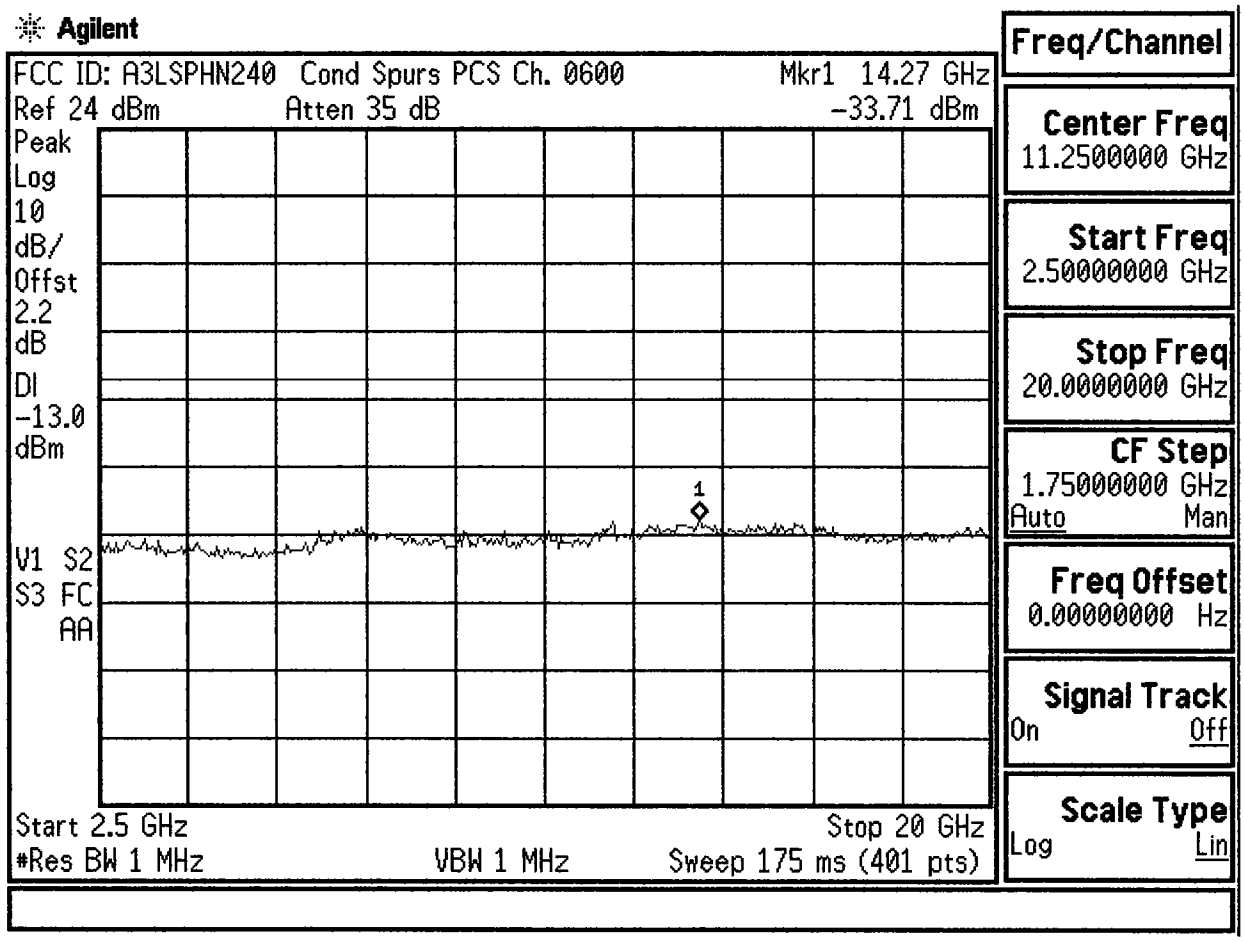

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0799
Mkr1 1.697 GHz
Ref 26 dBm
Atten 35 dB
-32 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

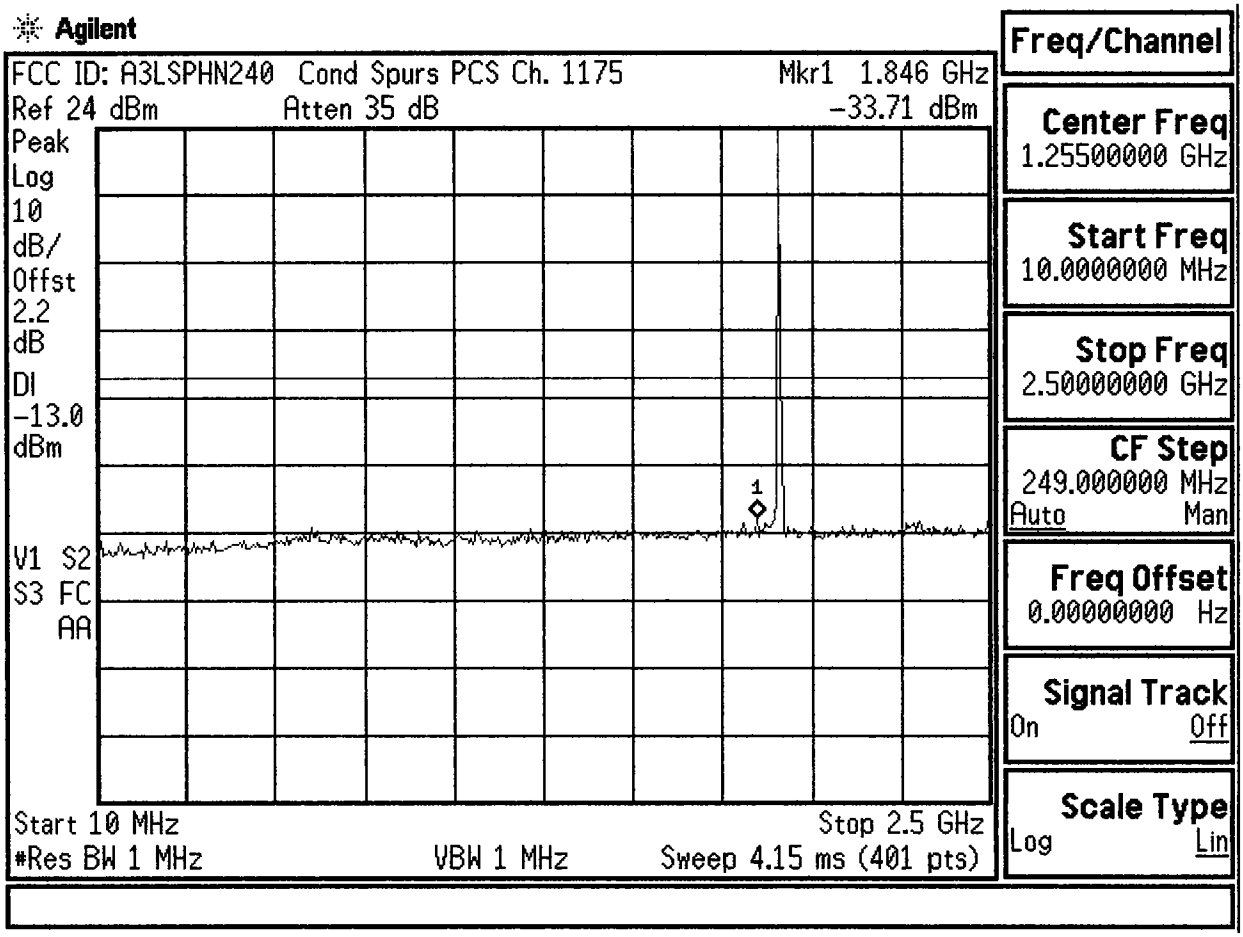

Agilent
FCC ID: A3LSPHN240 Cond Spurs FM Ch. 0799
Mkr1 2.99 GHz
Ref 26 dBm
Atten 35 dB
-34.76 dBm
Peak
Log
10
dB/
Offst
1.5
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

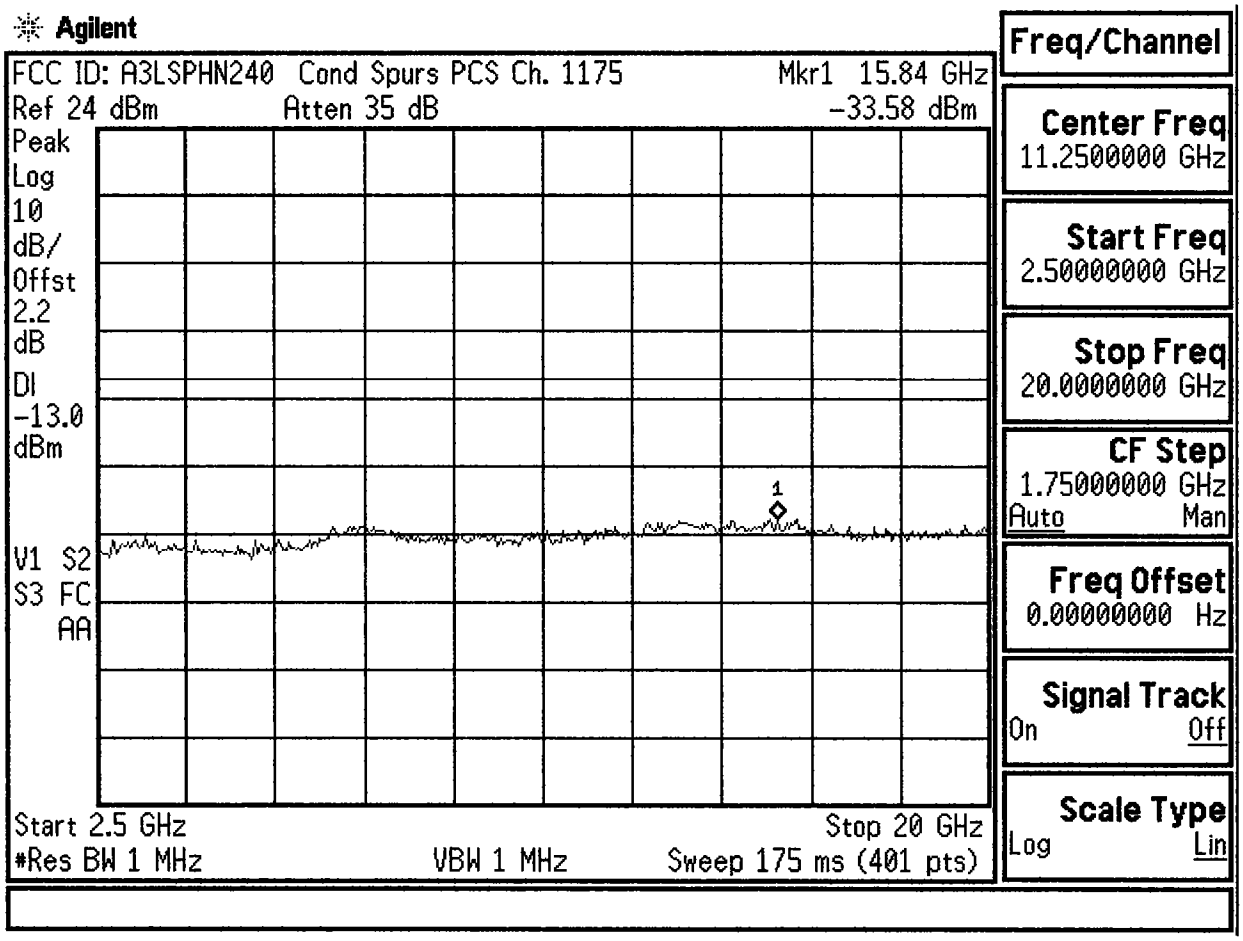

Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 0025
Mkr1 1.068 GHz
Ref 24 dBm
Atten 35 dB
-33.57 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

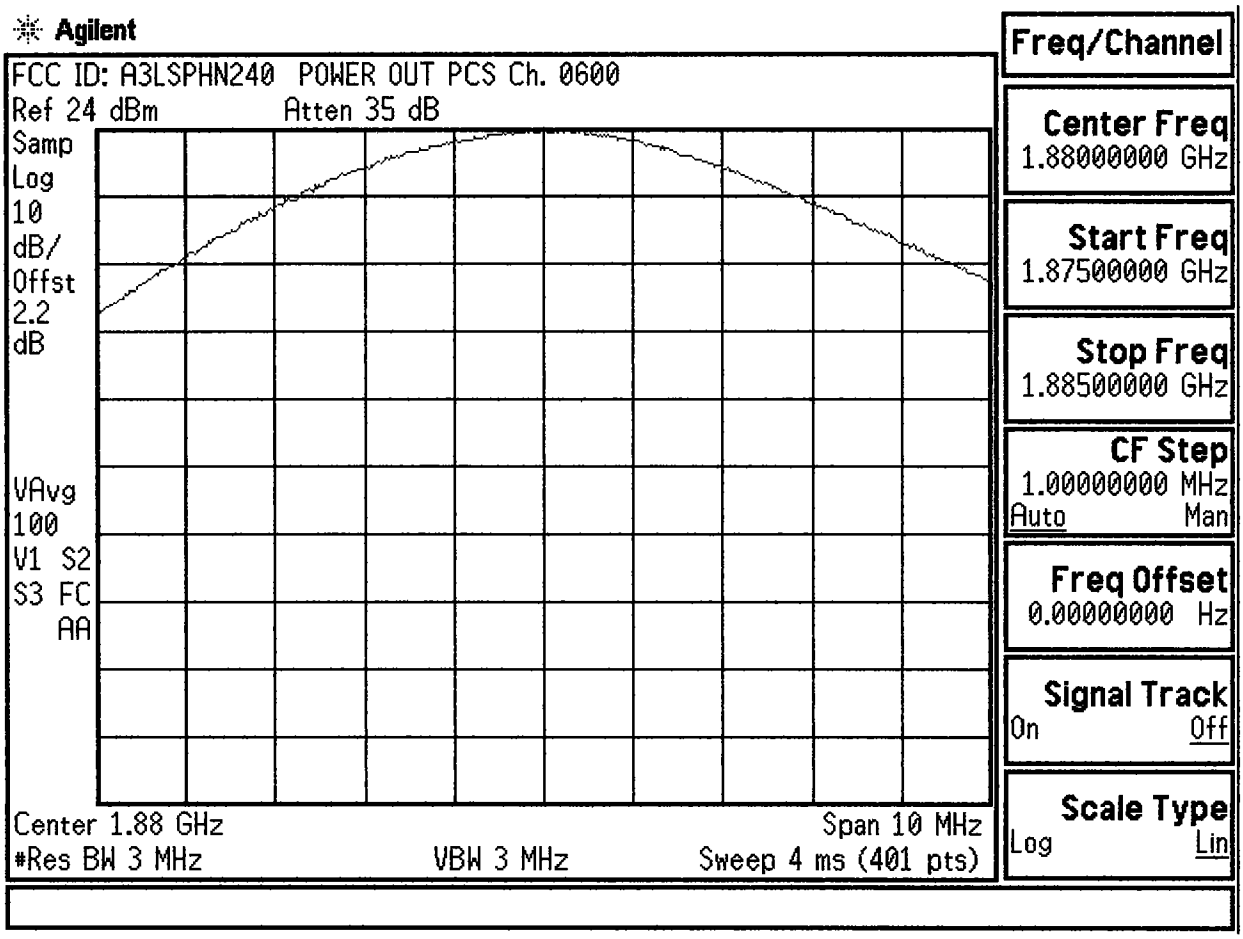

Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 0025
Mkr1 14.09 GHz
Ref 24 dBm
Atten 35 dB
-33.31 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 20 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 175 ms (401 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

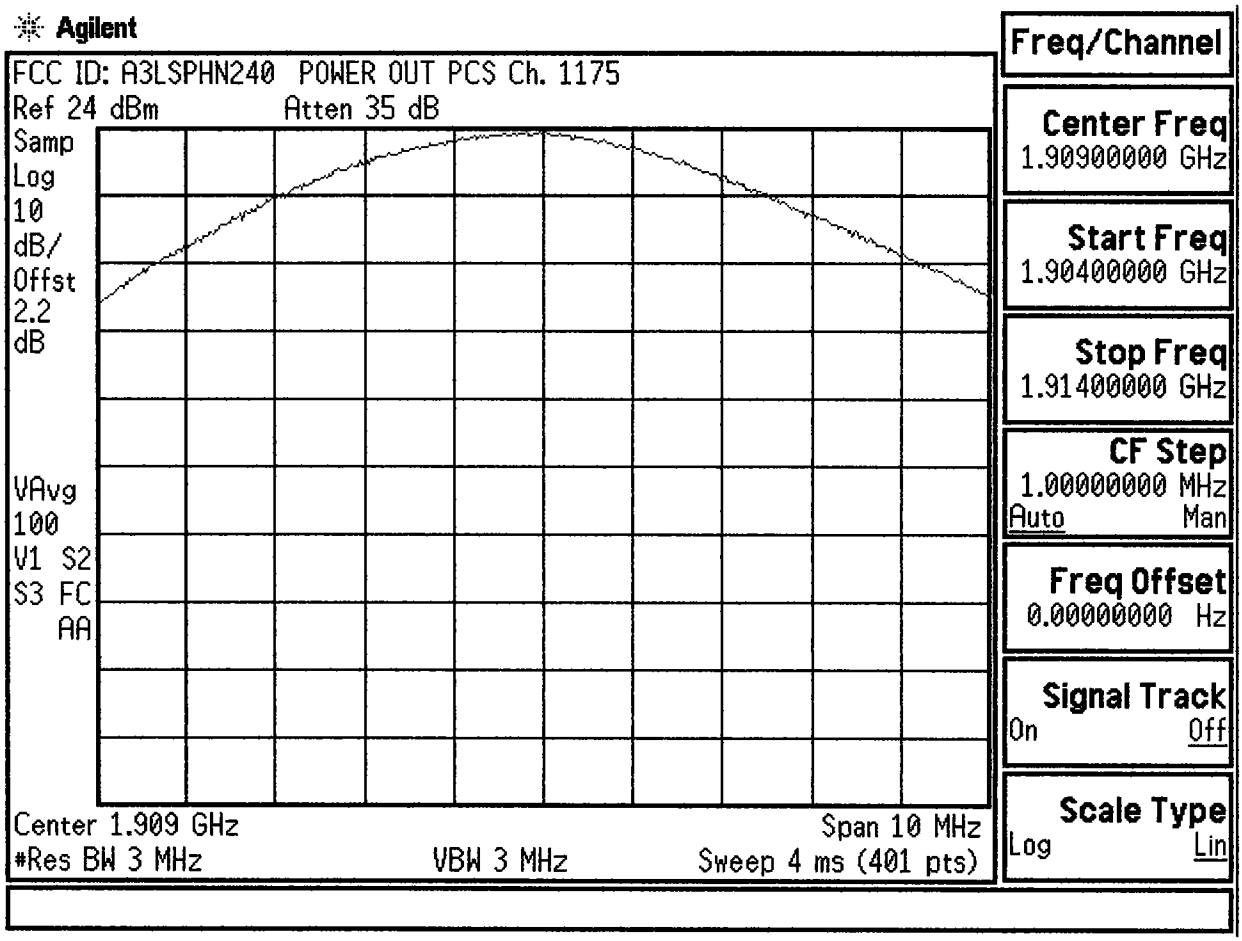

Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 0600
Mkr1 2.145 GHz
Ref 24 dBm
Atten 35 dB
-33.08 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

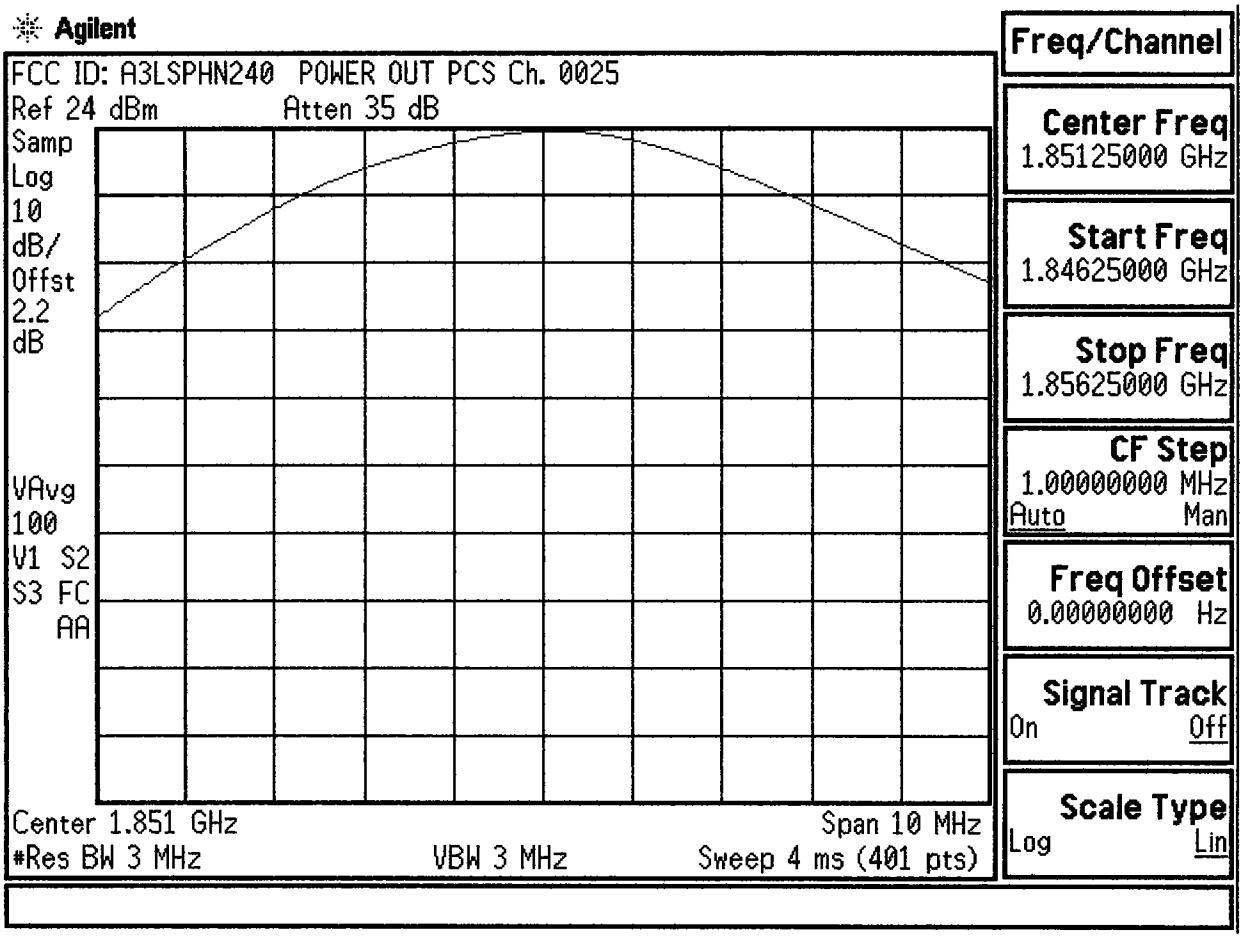

Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 0600
Mkr1 14.27 GHz
Ref 24 dBm
Atten 35 dB
-33.71 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 20 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 175 ms (401 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

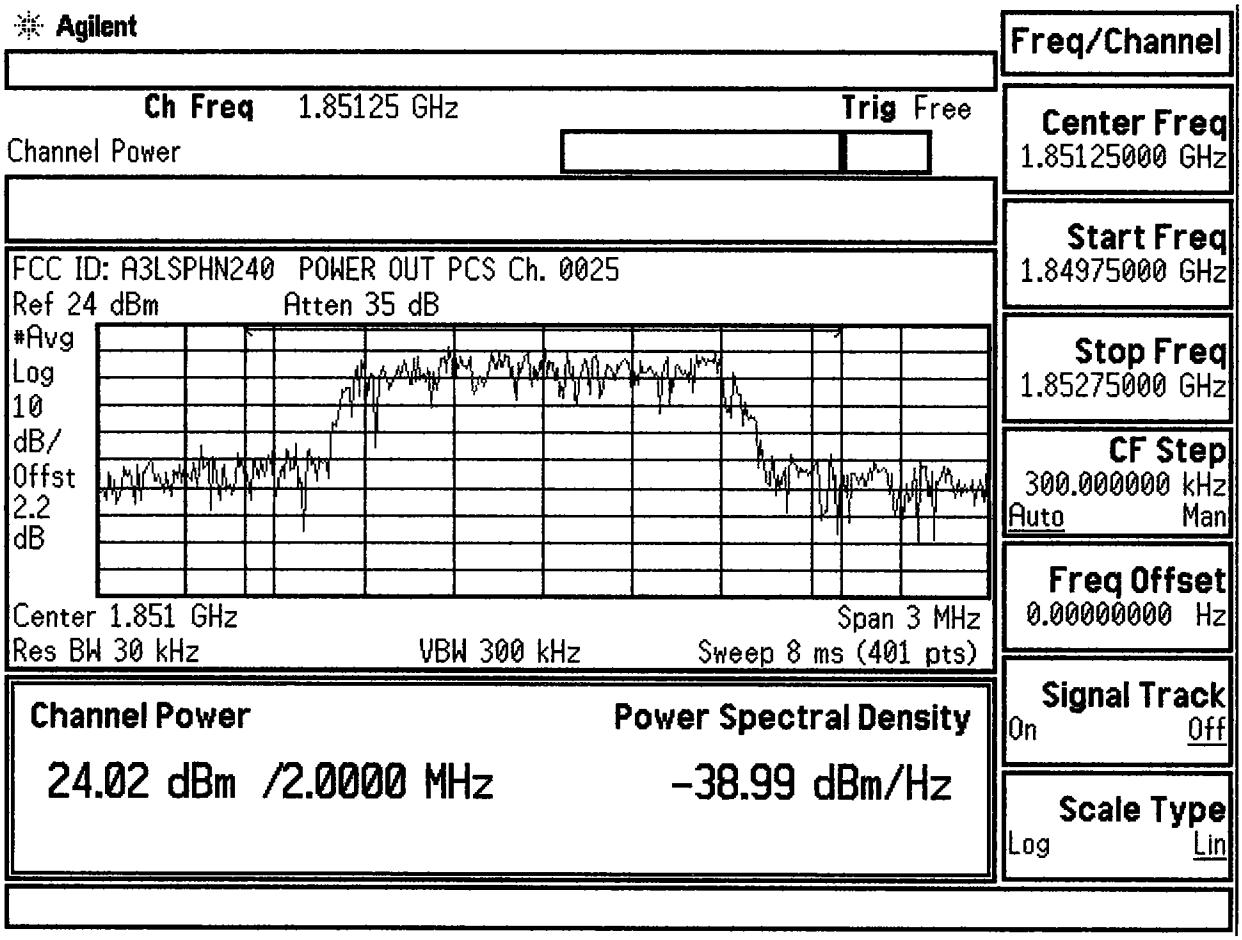

Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 1175
Mkr1 1.846 GHz
Ref 24 dBm
Atten 35 dB
-33.71 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: A3LSPHN240 Cond Spurs PCS Ch. 1175
Mkr1 15.84 GHz
Ref 24 dBm
Atten 35 dB
-33.58 dBm
Peak
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
1
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
Scale Type
Log
Lin


Agilent
FCC ID: A3LSPHN240 POWER OUT PCS Ch. 0600
Ref 24 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
VAvg
100
V1 S2
S3 FC
AA
Center 1.88 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 4 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
Scale Type
Log
Lin


Agilent
FCC ID: A3LSPHN240 POWER OUT PCS Ch. 1175
Ref 24 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
VAvg
100
V1 S2
S3 FC
AA
Center 1.909 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 4 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
Scale Type
Log
Lin


Agilent
FCC ID: A3LSPHN240 POWER OUT PCS Ch. 0025
Ref 24 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
VAvg
100
V1 S2
S3 FC
AA
Center 1.851 GHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 4 ms (401 pts)
Freq/Channel
Center Freq
1.85125000 GHz
Start Freq
1.84625000 GHz
Stop Freq
1.85625000 GHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin


Agilent
Ch Freq 1.85125 GHz
Trig Free
Channel Power
FCC ID: A3LSPHN240 POWER OUT PCS Ch. 0025
Ref 24 dBm
Atten 35 dB
#Avg
Log
10
dB/
Offst
2.2
dB
Center 1.851 GHz
Span 3 MHz
Res BW 30 kHz
VBW 300 kHz
Sweep 8 ms (401 pts)
Channel Power
24.02 dBm /2.0000 MHz
Power Spectral Density
-38.99 dBm/Hz
Freq/Channel
Center Freq
1.85125000 GHz
Start Freq
1.84975000 GHz
Stop Freq
1.85275000 GHz
CF Step
300.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

Agilent

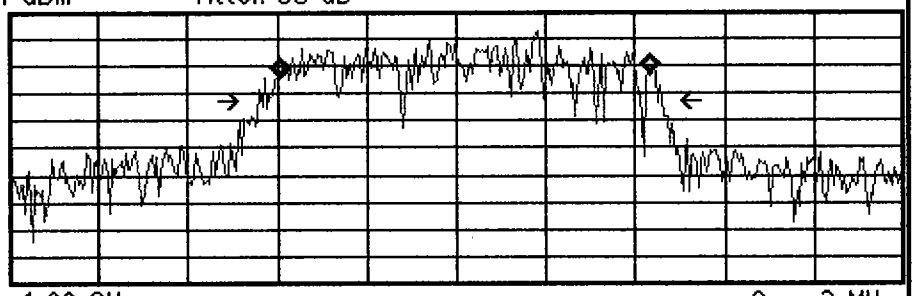
Ch Freq 1.88 GHz **Trig** Free

Occupied Bandwidth

FCC ID: A3LSPHN240 POWER OUT PCS Ch. 0600

Ref 24 dBm Atten 35 dB

#Samp
Log
10
dB/
Offst
2.2
dB



Center 1.88 GHz Span 3 MHz

#Res BW 30 kHz #VBW 300 kHz Sweep 5.288 ms (401 pts)

Occupied Bandwidth

1.2502 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error 29.578 kHz

x dB Bandwidth 1.356 MHz*

Freq/Channel

Center Freq
1.88000000 GHz

Start Freq
1.87850000 GHz

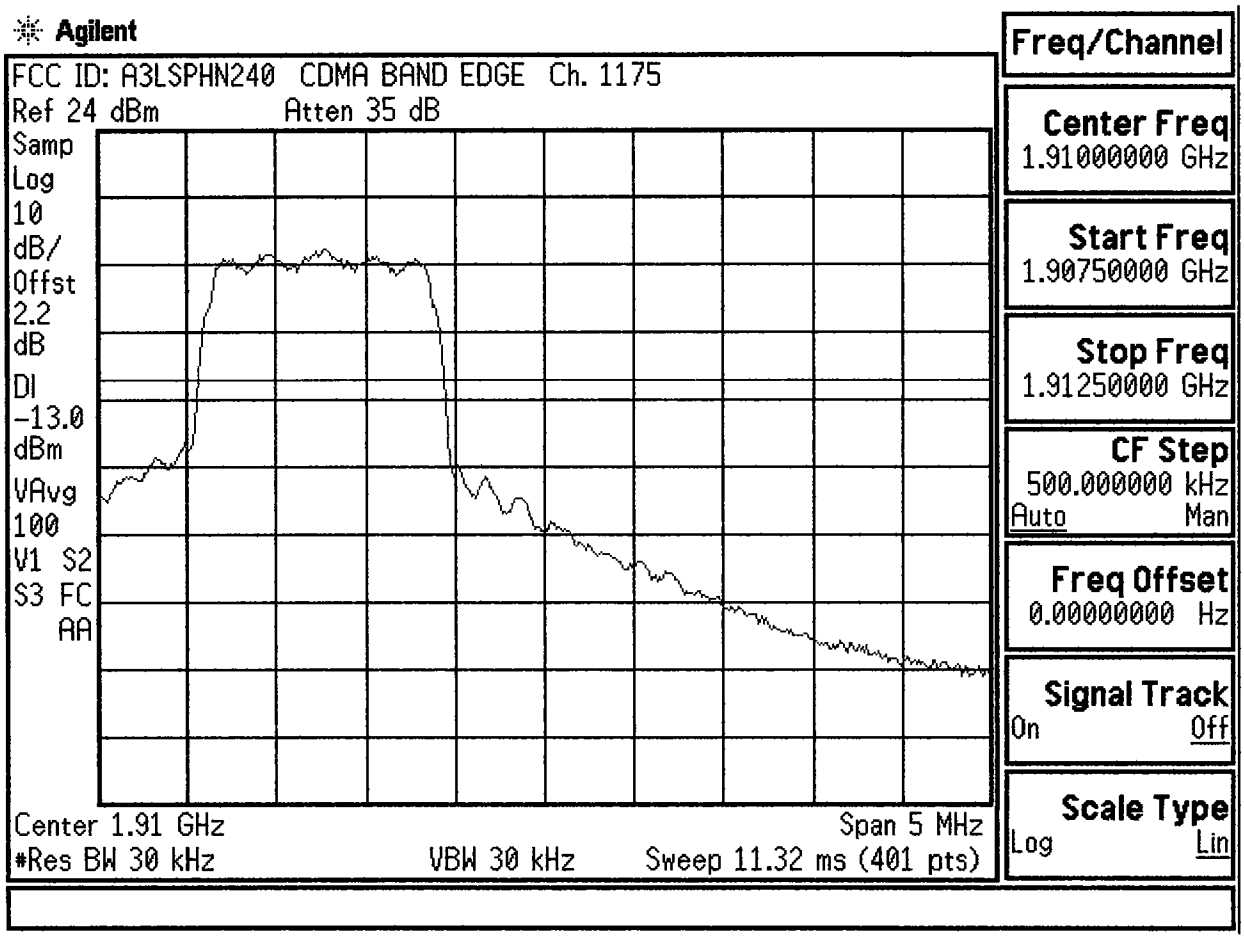
Stop Freq
1.88150000 GHz

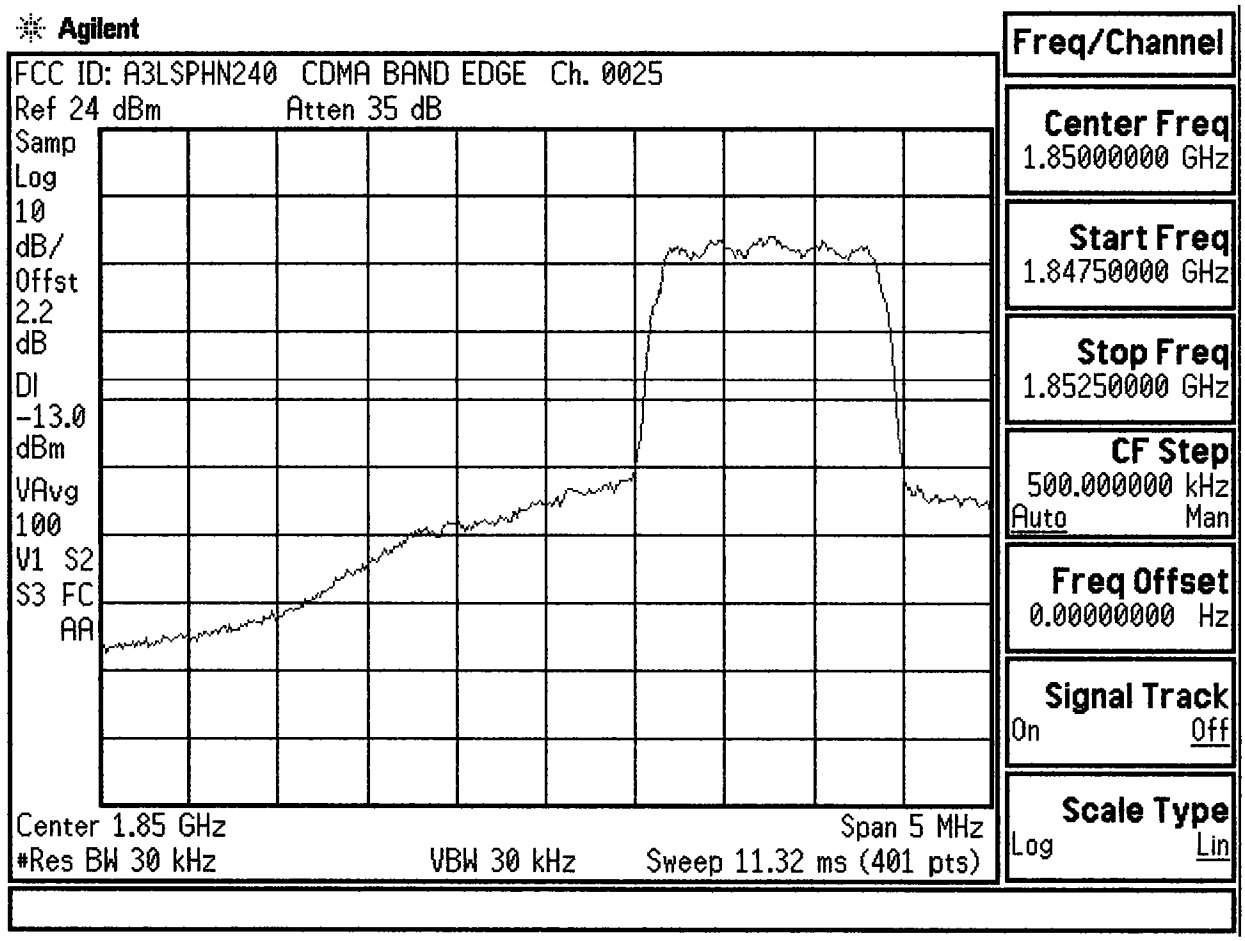
CF Step
300.000000 kHz
Auto Man

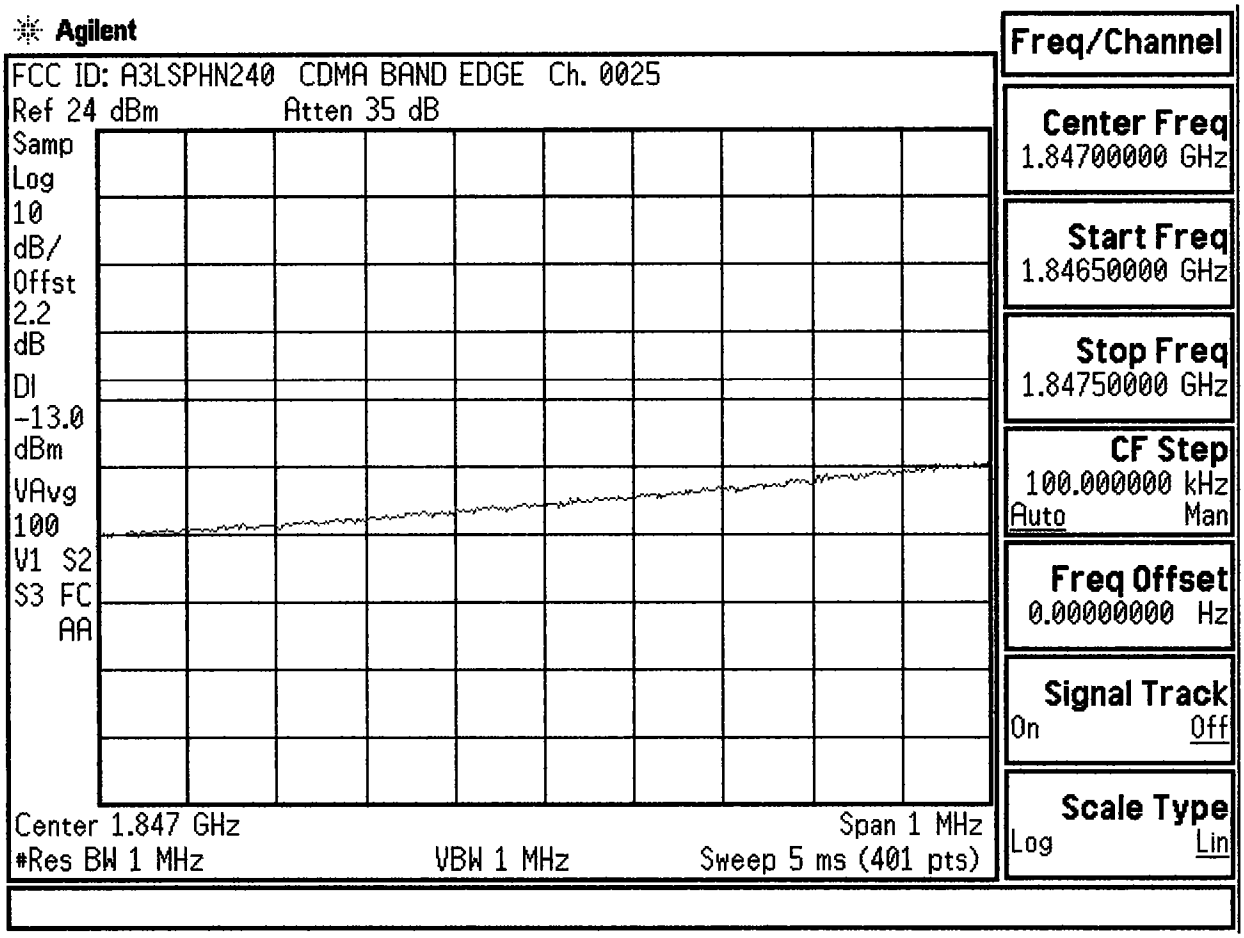
Freq Offset
0.00000000 Hz

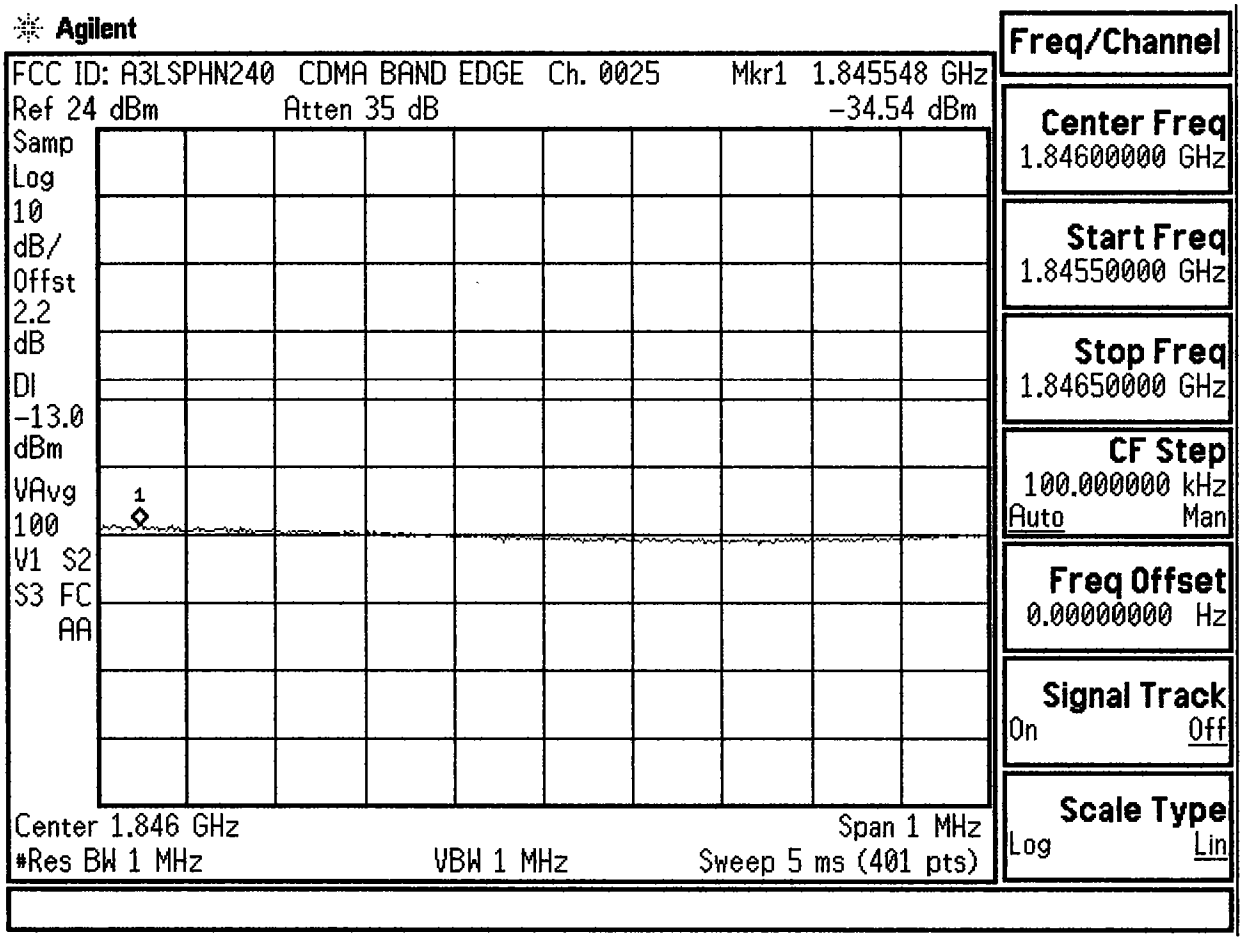
Signal Track
On Off

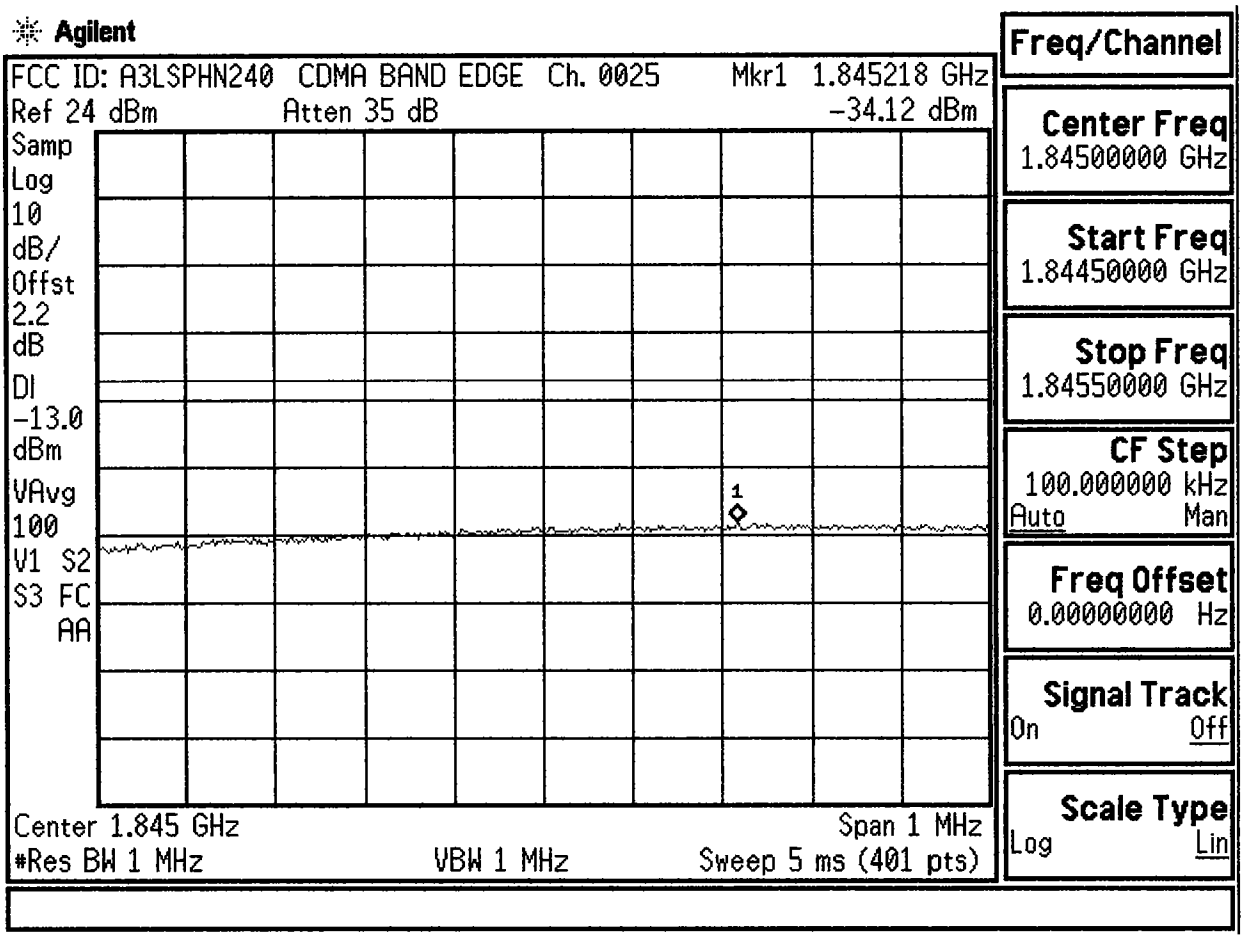
Scale Type
Log Lin

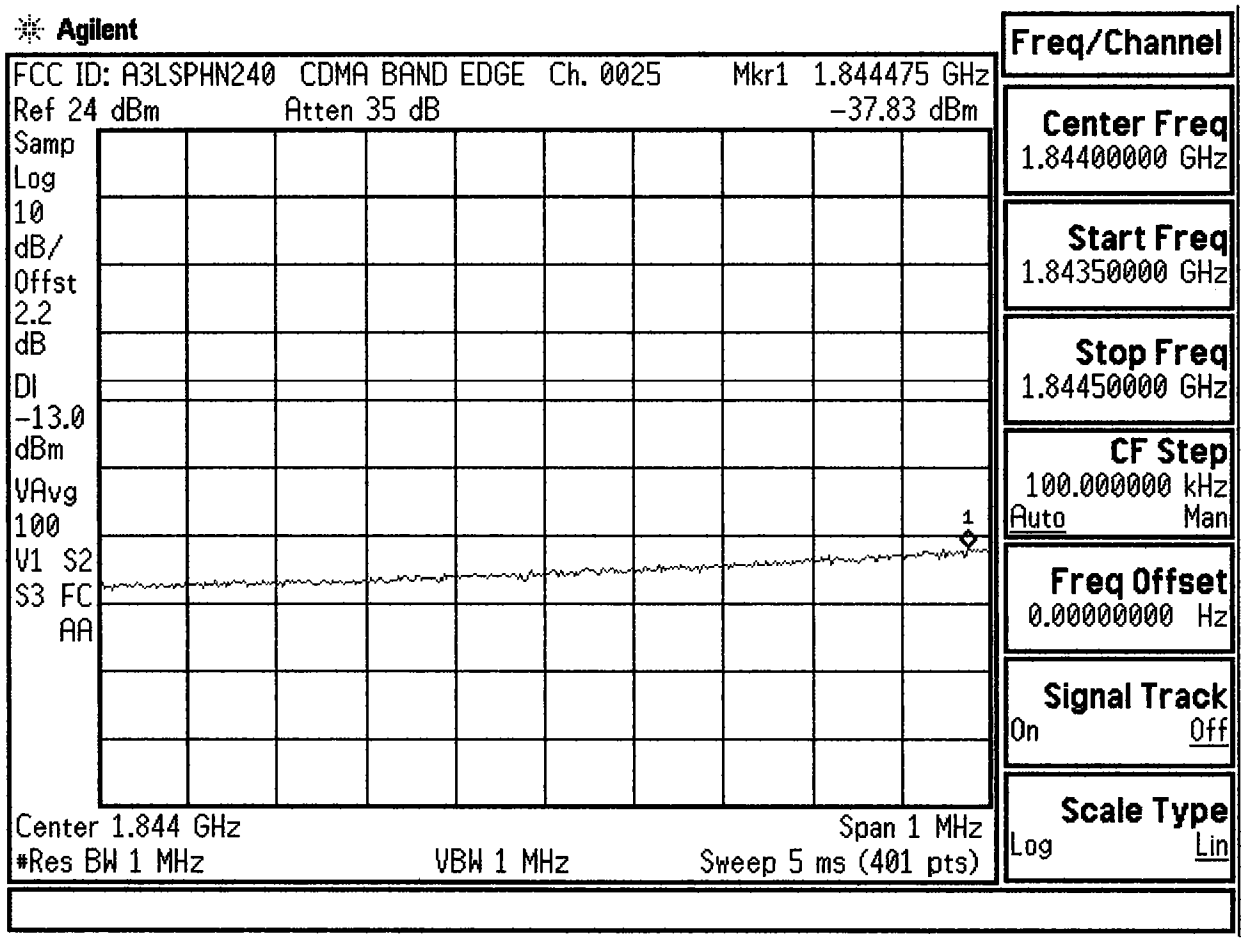

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 1175
Ref 24 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 1.91 GHz
Span 5 MHz
#Res BW 30 kHz
VBW 30 kHz
Sweep 11.32 ms (401 pts)
Freq/Channel
Center Freq
1.91000000 GHz
Start Freq
1.90750000 GHz
Stop Freq
1.91250000 GHz
CF Step
500.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

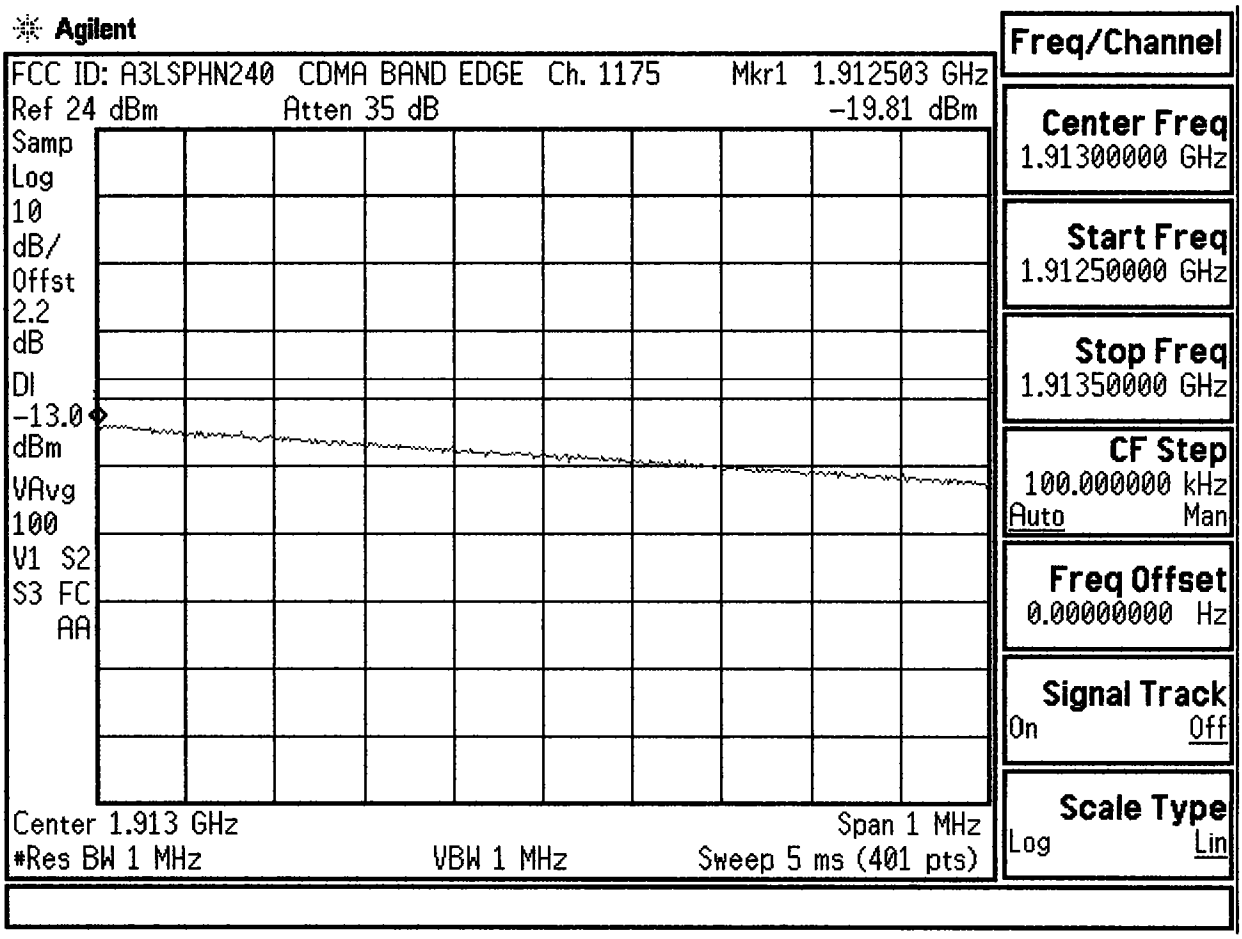

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 0025
Ref 24 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 1.85 GHz
Span 5 MHz
#Res BW 30 kHz
VBW 30 kHz
Sweep 11.32 ms (401 pts)
Freq/Channel
Center Freq
1.85000000 GHz
Start Freq
1.84750000 GHz
Stop Freq
1.85250000 GHz
CF Step
500.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

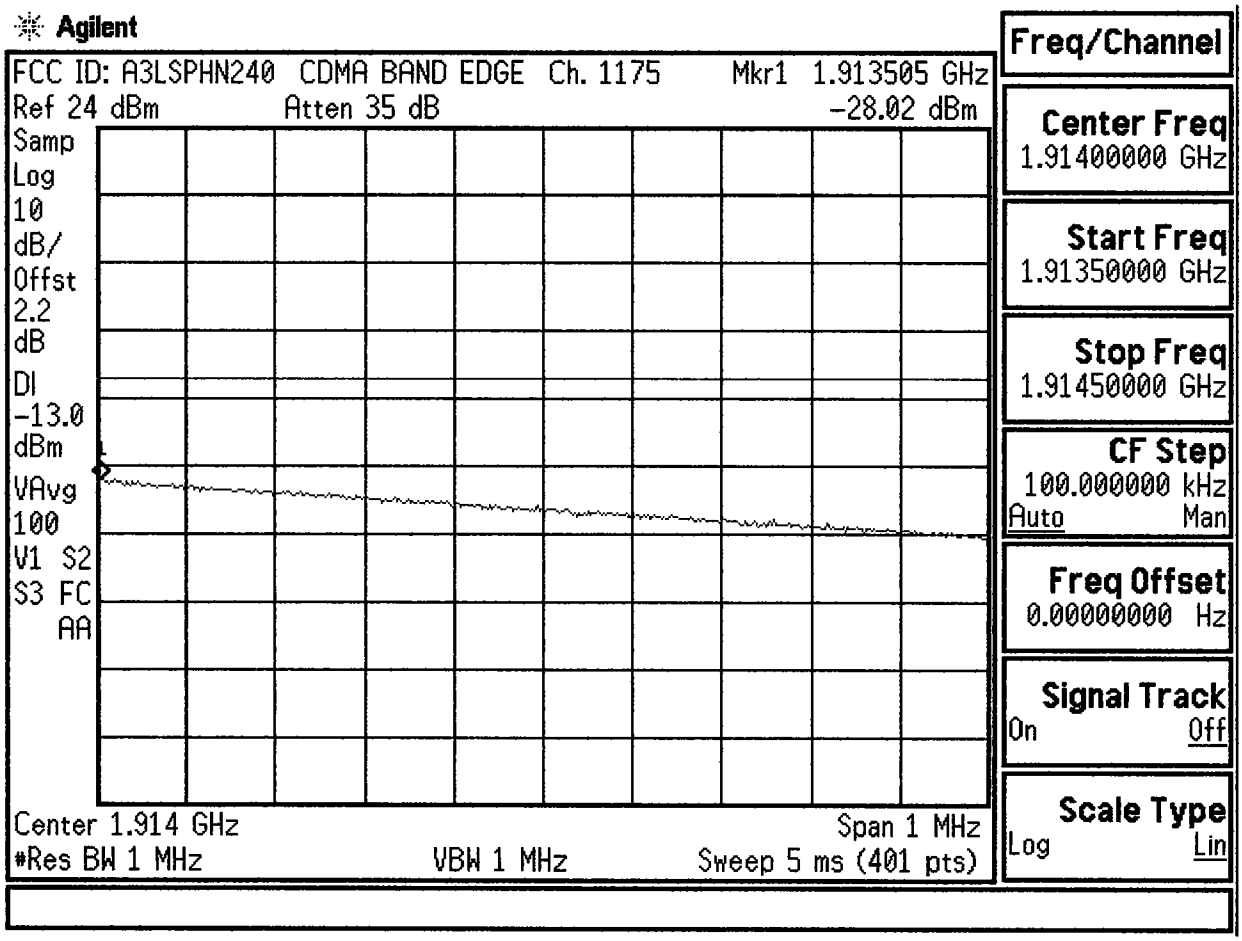

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 0025
Ref 24 dBm Atten 35 dB
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 1.847 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.84700000 GHz
Start Freq
1.84650000 GHz
Stop Freq
1.84750000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

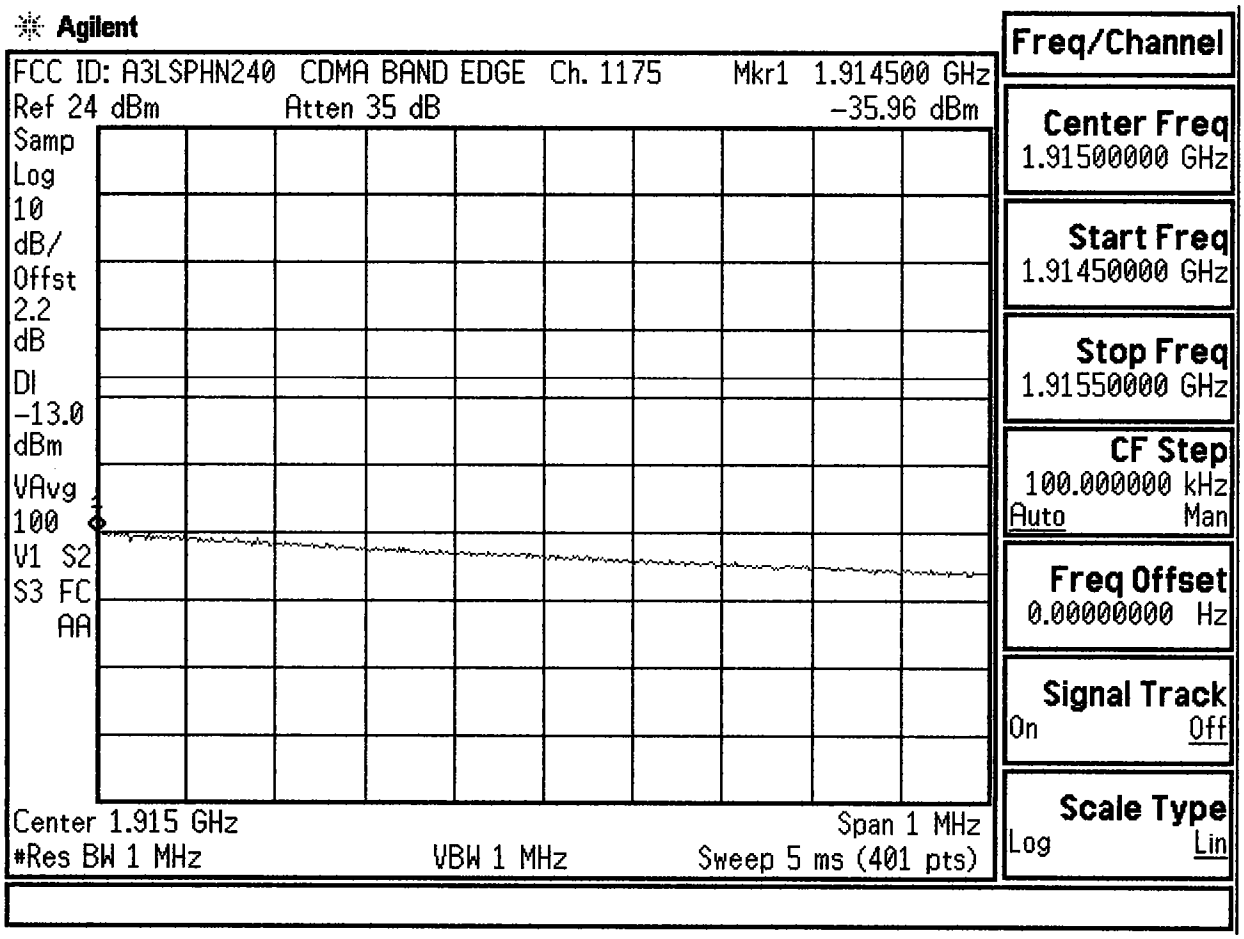

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 0025 Mkr1 1.845548 GHz
Ref 24 dBm Atten 35 dB -34.54 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
1
V1 S2
S3 FC
AA
Center 1.846 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.84600000 GHz
Start Freq
1.84550000 GHz
Stop Freq
1.84650000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

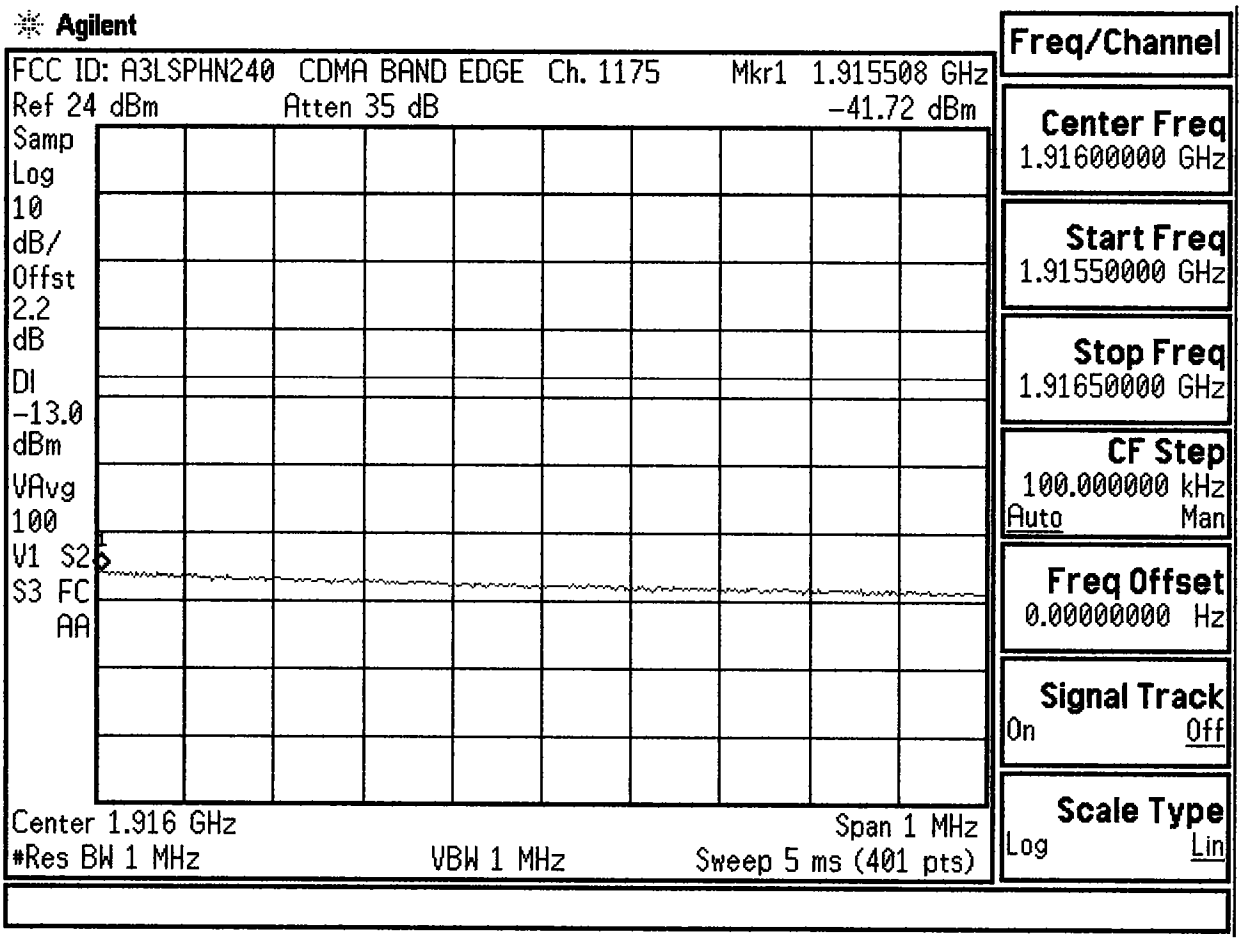

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 0025 Mkr1 1.845218 GHz
Ref 24 dBm Atten 35 dB -34.12 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
1
Center 1.845 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.84500000 GHz
Start Freq
1.84450000 GHz
Stop Freq
1.84550000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin


Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 0025 Mkr1 1.844475 GHz
Ref 24 dBm Atten 35 dB -37.83 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
1
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
Scale Type
Log Lin


Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 1175 Mkr1 1.912503 GHz
Ref 24 dBm Atten 35 dB -19.81 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
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
Scale Type
Log Lin


Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 1175 Mkr1 1.913505 GHz
Ref 24 dBm Atten 35 dB -28.02 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
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
Scale Type
Log Lin


Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 1175 Mkr1 1.914500 GHz
Ref 24 dBm Atten 35 dB -35.96 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
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
Scale Type
Log Lin

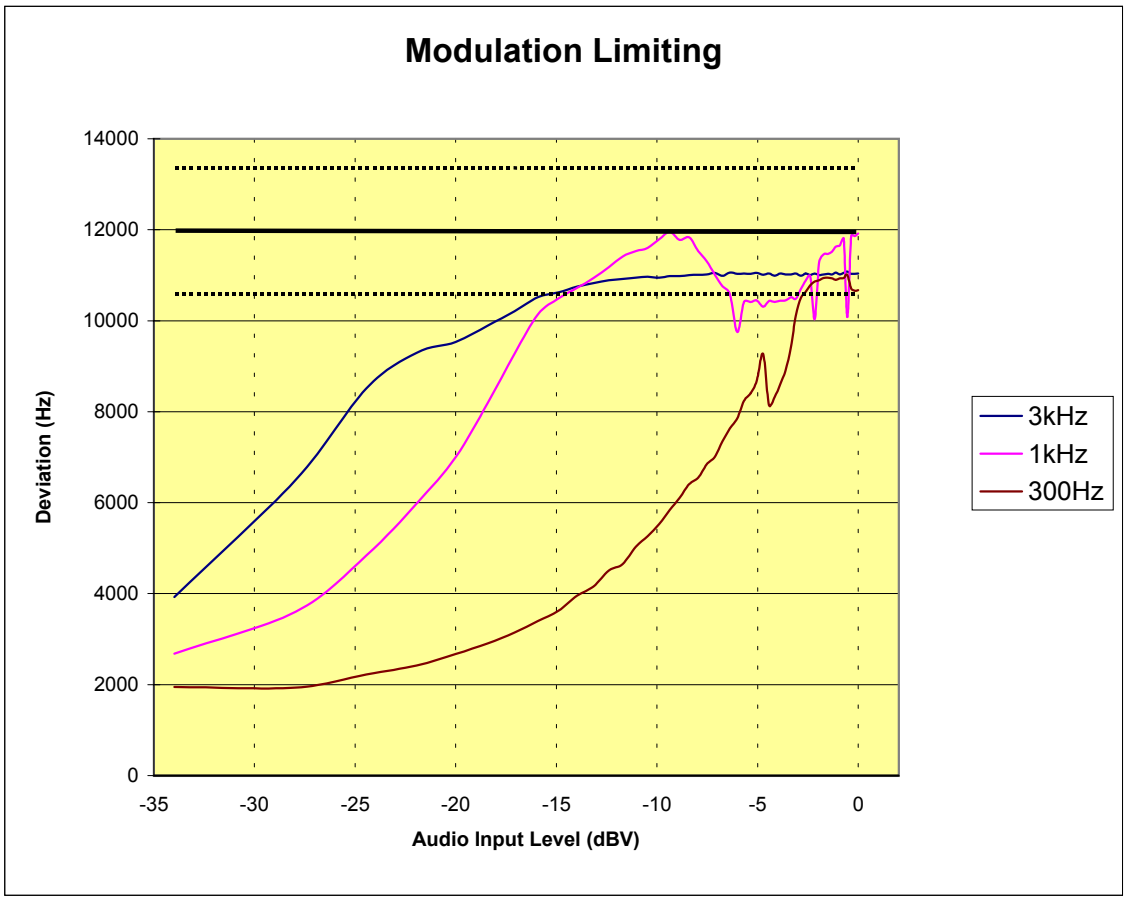

Agilent
FCC ID: A3LSPHN240 CDMA BAND EDGE Ch. 1175 Mkr1 1.915508 GHz
Ref 24 dBm Atten 35 dB -41.72 dBm
Samp
Log
10
dB/
Offst
2.2
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 1.916 GHz
Span 1 MHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 5 ms (401 pts)
Freq/Channel
Center Freq
1.91600000 GHz
Start Freq
1.91550000 GHz
Stop Freq
1.91650000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No. 24/22.220311103.A3L
Test Date: 03.11-12.2002

EUT: SAMSUNG Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-N240*
FCC ID: **A3LSPHN240**

REFERENCE: 1 kHz = 0 dB

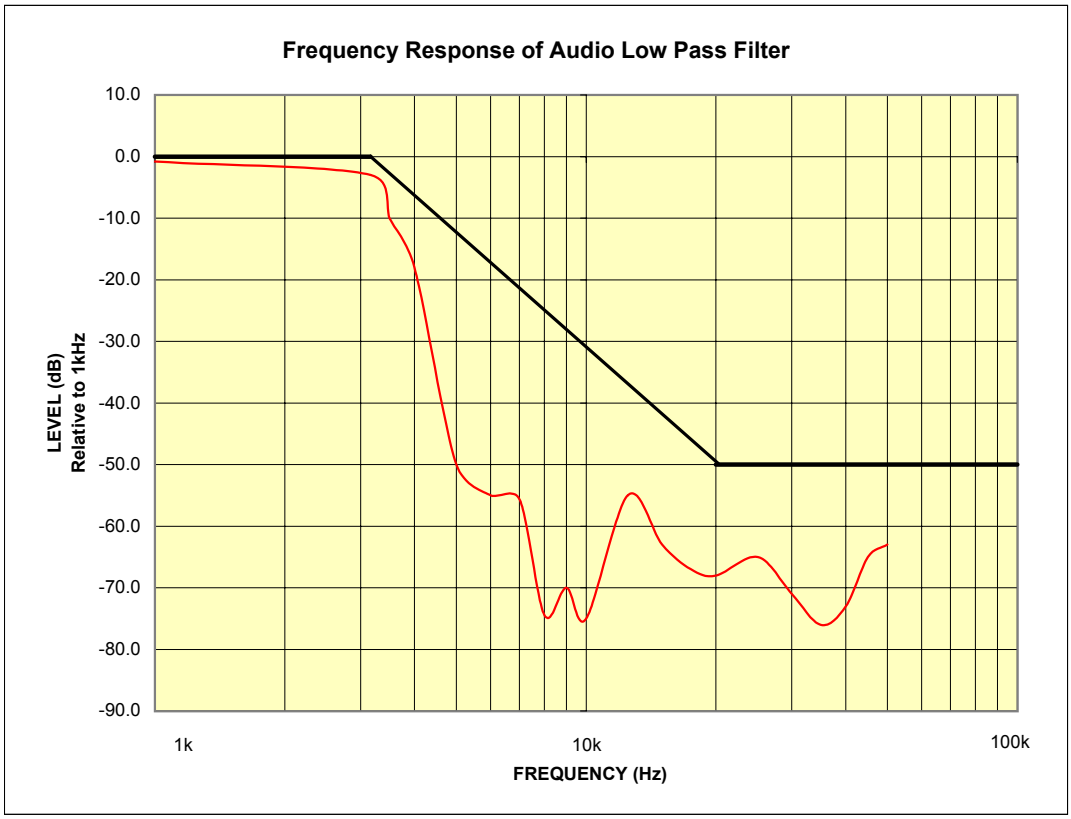


SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 24/22.220311103.A3L
Test Date: 03.11-12.2002

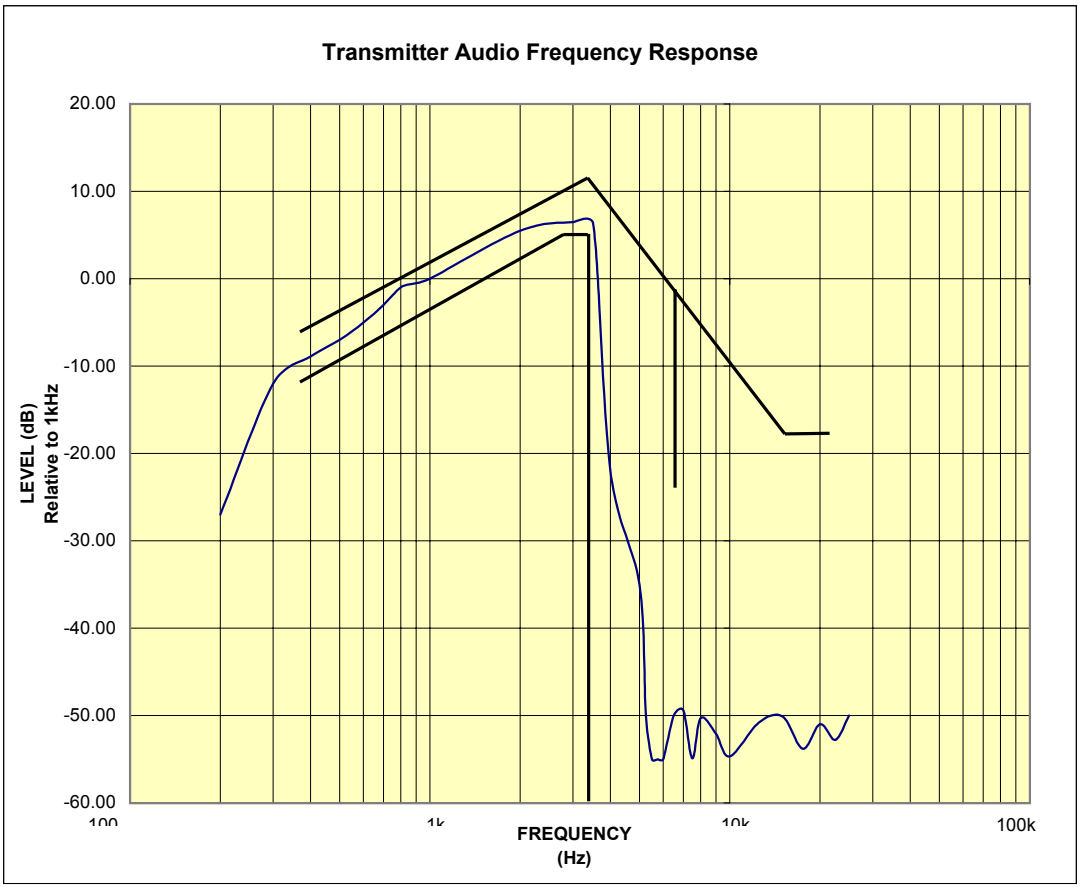
EUT: SAMSUNG Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-N240*
FCC ID: **A3LSPHN240**

REFERENCE: 1 kHz = 0 dB



SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 24/22.220311103.A3L
Test Date: 03.11-12.2002

EUT: SAMSUNG Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: *SPH-N240*
FCC ID: **A3LSPHN240**

REFERENCE: 1 kHz = 0 dB