**SAMSUNG ELECTRONICS Co., Ltd.,**
**Regulatory Compliance Team**
**IT R&D Center**
416, Maetan-3dong,
Paldal-gu, Suwon-si,
Gyeonggi-do, Korea 442-742

# FCC CFR47 PART 22 SUBPART CERTIFICATION REPORT

| | |
|---|---|
| **Model Tested:** | **SCH-N361** |
| **FCC ID (Requested):** | **A3LSCHN361** |
| **Report No:** | **FA-029-R1** |
| **Date issued:** | **October 23, 2003** |

- Abstract –
All measurement reported herein accordance with FCC Rules, 47CFR Part2, Part22.

| | | | |
|---|---|---|---|
| **Prepared By** | EH JUNG– Test Engineer | **Date** | 2003.10.24 |
| **Checked By** | CW PARK - Manager | **Date** | 2003.10.24 |
| **Authorized By** | JK CHOI – Senior Manager | **Date** | 2003.10.24 |

# TABLE OF CONTENT

## MEASUREMENT REPORT

Page



## ATTACHMENT

# MEASUREMENT REPORT

## 1. FCC Certification Information

The following information is in accordance with FCC Rules, 47CFR Rart2, Subpart J, Sections 2.1033 – 2.1055.

### 1.1 §2.1033 General Information

| | |
|---|---|
| · Applicant Name: | SAMSUNG ELECRONICS CO., LTD. |
| · Address: | 416Maetan-3Dong, Paldal-Gu Suwon City Kyungki-Do 441-742, KOREA |
| · Attention: | Wallace Oh, Engineering Manager (QA Lab) |
| · FCC ID: | A3LSCHN361 |
| · Quantity: | Quantity production is planned |
| · Emission Designators: | 1M25F9W |
| · Tx Freq. Range: | 824.70-848.31MHz |
| · Rx Freq. Range: | 869.70-893.31 MHz |
| · Max. Power Rating: | 0.231WERP CDMA(23.63dBm) |
| · FCC Classification(s): | Non-Broadcast Transmitter Held to Ear (TNE) |
| · Equipment (EUT) Type: | Single modulation CDMA Phone |
| · Modulation(s): | CDMA |
| · Frequency Tolerance: | ±0.00025% (2.5ppm) |
| · FCC Rule Part(s): | Rule Part2 §22(H) |
| · Dates of Test: | Oct.06,14-15, 2003 |
| · Place of Test: | SAMSUNG Lab, |
| · Test Report S/N: | A3LSCHN361 |

# 2. INTRODUCTION

## 2.1 General

These measurement test were conducted at **SAMSUNG ELECTRONICS CO., LTD(SUWON)**.
The site address is 416Maetan-3Dong, Paldal-Gu Suwon City Gyungki-Do 441-742, KOREA
The site has 1 Fully-anechoic chamber and measurement facility.

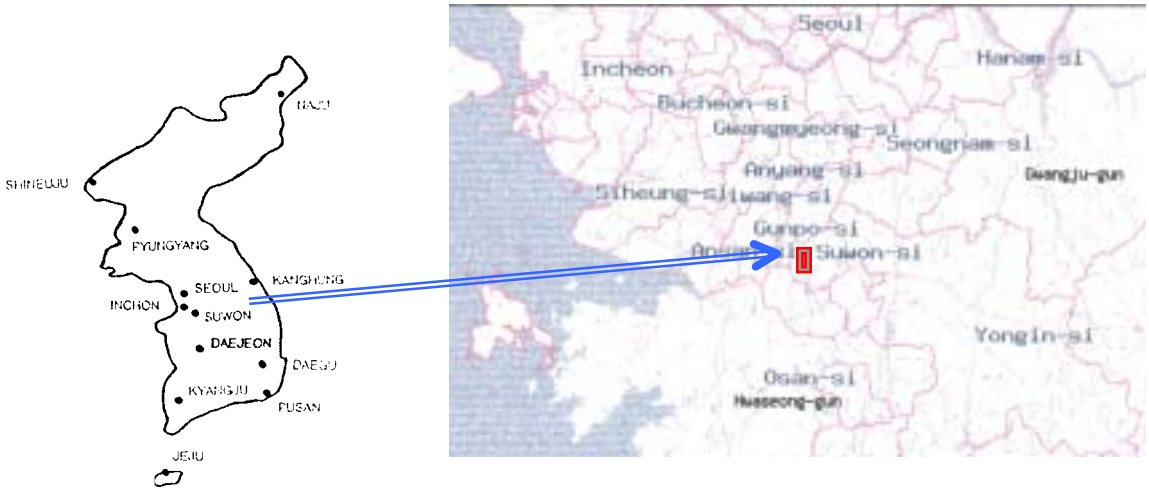


**Figure1. Map of the Suwon City area.**

Measurement Procedure
The radiated and spurious measurements were made Fully-anechoic chamber at a 3-meter test range (see Figure2). The equipment under testing was placed on a wooden turntable. 3-meters from the receive antenna. The receive antenna height and turntable rotations was adjusted for the highest reading on the receive spectrum analyzer. The substitution antenna will replace the EUT antenna it the same position and in vertical polarization. The frequency of the signal generator shall be set to the frequencies that were measured on the EUT. The test antenna shall be raised and lowered, if necessary, to ensure that the maximum signal is still being received. The signal generator, output level, shall be adjusted until an equal or a known related level to what was measured from the EUT is obtained in the spectrum analyzer. This level was recorded.
For readings above 1 GHz, the above procedure would be repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

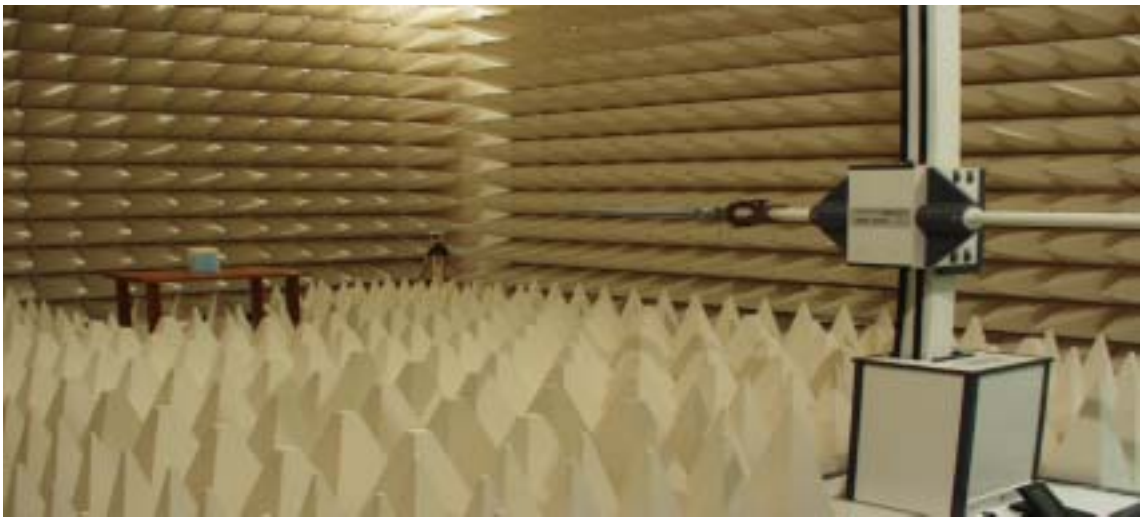

**Figure2. Photograph of 3m Fully-Anechoic Chamber**

## 3. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

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## 4. TEST EQUIPMENT LIST

| Name of Equipment | Model | Serial No. | Due Date |
|---|---|---|---|
| Spectrum Analyzer | FSIQ26 | 100153 | 2004-08-19 |
| | FSU | MY41000236 | 2004-04-03 |
| | E4440A(3Hz~26.5GHz) | MY41000233 | 2003-11-25 |
| Signal Generator | SMIQ03B | 83824/021 | 2004-01-20 |
| | SMR20 | 835197/030 | 2004-01-20 |
| Power Meter | E4419B | GB41293846 | 2004-10-02 |
| Power Sensor | 8481B | 3318A10325 | 2004-10-06 |
| | 8485A | 3318A19924 | 2004-10-04 |
| Amplifier | 5S1G4 | 304866 | 2003-11-26 |
| Pre-Amplifier | 8449B | 3008A00691 | 2004-01-21 |
| Communication test set | 8960 | GB42230535 | 2004-01-09 |
| | 8960 | GB42360886 | 2004-01-09 |
| Antenna Master | MA0001 | ANT0967 | Not Required |
| Controller | HD100 | 100/756 | Not Required |
| Environmental Chamber | PL-4S | 13005454 | 2004-08-22 |
| | SH-241 | 92000548 | 2003-12-12 |
| | SH-241 | 92000549 | 2003-12-12 |
| Horn Antenna | HF906 | 360306/011 | 2004-02-10 |
| | HF906 | 100134 | 2004-02-10 |
| Dipole Antenna | 3121C-DB4 | 9007-587 | 2004-03-21 |
| | 3121C-DB4 | 9007-588 | 2004-03-21 |
| Receive Antenna | HO040 | 353255/020 | 2004-04-08 |
| Attenuator | 8494A | 3308A31997 | 2004-01-20 |
| | 8496A | 3308A14426 | 2004-01-20 |
| Directional Coupler | 4278-311-2 | B3679637 | 2004-01-22 |
| | 4278-111-2 | B103DC8722 | 2004-01-22 |
| High Pass Filter | WHK1.0/15G-10SS | 1 | Not Required |
| | WHK1.0/15G-10SS | 1 | Not Required |
| | WHK/3.5/18G-10SS | 3 | Not Required |
| | WHK/3.5/18G-10SS | 4 | Not Required |
| Shielded Semi-Anechoic Chamber | RF0002 | ANT0001 | 2004-01-21 |

# 5. DESCRIPTION OF TESTS

## 5.1 Effective Radiated Power

### Test Set-up for the ERP/EIRP TEST

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

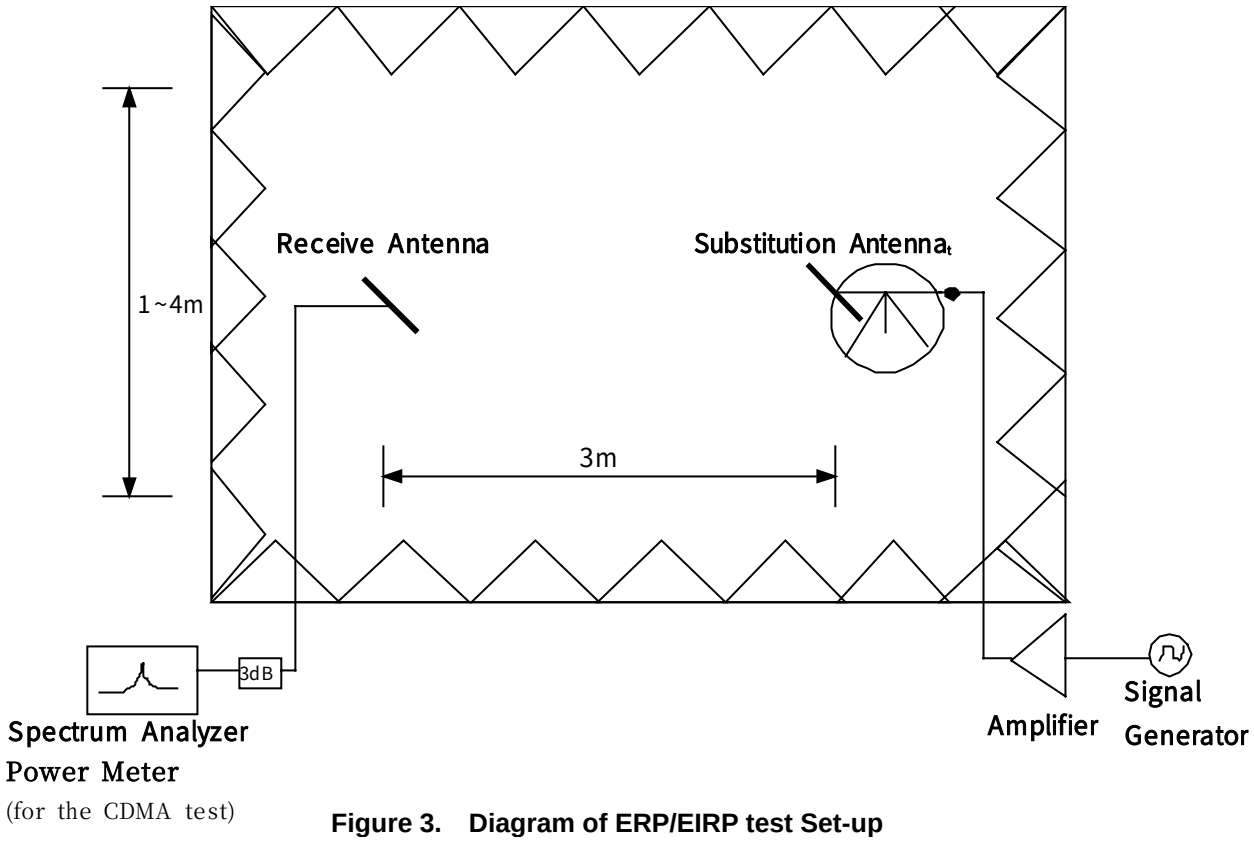



**Figure 3. Diagram of ERP/EIRP test Set-up**

The EUT was placed on a Non-conducted turntable 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of dipole is measured. The ERP is recorded. For readings above 1GHz, the above procedure is repeated using horn antenna and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

## 5.2 Radiated Spurious & Harmonic Emission

### Test Set-up for the Radiated Emission TEST

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001

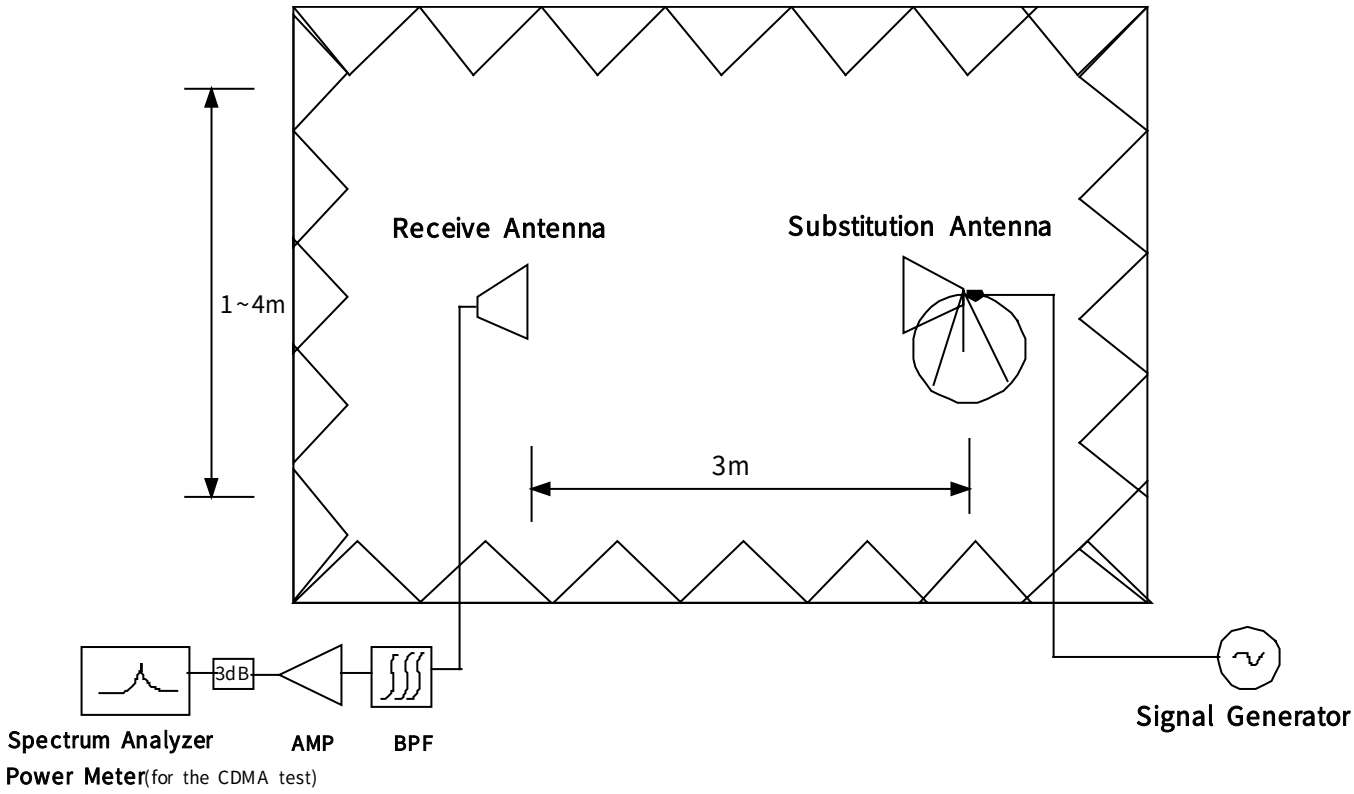



**Figure 4. Diagram of Radiated Spurious & Harmonic test Set-up**

The EUT was placed on a Non-conducted turntable 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

### SAMPLE CALCULATION

**Example: Channel 25 PCS Mode 2nd Harmonic(3702.50MHz)**

The receive analyzer reading at 3meters with the EUT on the turntable was –81.0dBm. The gain of the substituted antenna is 8.1dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of –81.0dBm of the receive analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0dB at 3702.50MHz. So 6.1dB is added to the signal generator reading of –30.9dBm yielding –24.80dBm. The fundamental EIRP was 25.501dBm so this harmonic was 25.501dBm –(-24.80)= 50.3dBc .

## 5.3 Occupied Bandwidth

**Test Procedure**

The EUT was setup to maximum output power at its lowest channel. The occupied bandwidth was measured using a spectrum analyzer. The measurements are repeated for the highest and a middle channel. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

Plots of the EUT's occupied bandwidth are shown herein.

## 5.4 Spurious and Harmonic Emissions at Antenna Terminal

### 5.4.1 Occupied Bandwidth Emission Limits

(a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB.

(b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(d) The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

| BLOCK | Freq. Range (MHz) Transmitter (Tx) | Freq. Range (MHz) Receiver (Rx) |
|---|---|---|
| A | 1850 – 1865 | 1930 – 1945 |
| B | 1870 – 1885 | 1950 – 1965 |
| C | 1895 – 1910 | 1975 – 1990 |
| D | 1865 – 1870 | 1945 – 1950 |
| E | 1885 – 1890 | 1965 – 1970 |
| F | 1890 – 1895 | 1970 – 1975 |

**Table 1. Broadband PCS Service Frequency Blocks.**

## 5.4.2 Conducted Spurious Emission

**Minimum standard:**
On any frequency outside a license frequency block, the power of any emission shall be attenuated below the transmitter power(P) by at least 43+10log (P)dB. Limit equivalent to –13dBm, calculation shown below.

43 + 10log (0.231W) = 36.64dB
25dBm – 36.64dB = -11.64dBm

## Test Procedure:

The EUT was setup to maximum output power at its lowest channel. The Resolution BW of the analyzer is set to 1% of the emission bandwidth to show compliance with the –13dBm limit, in the 1MHz bands immediately outside and adjacent to the edge of the frequency block. The measurements are repeated for the EUT's highest channel. For the Out-of-Band measurements a 1MHz RBW was used to scan from 10MHz to 10GHz. (PCS Mode : 10MHz to 20GHz). A display line was placed at –13dBm to show compliance. The high, lowest and a middle channel were tested for out of band measurements.

Plots are shown herein.

## 5.5 Frequency Stability / Temperature Variation

The frequency stability of the transmitter is measured by:

a.) Temperature: The temperature is carried from -30°C to +60°C using an environmental chamber.
b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the voltage normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification- The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.0001 (±1ppm) of the center frequency.

Time Period and Procedure:

1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature(25°C to 27°C to provide a reference).
2. The equipment is subjected to an overnight “soak” at -30°C without any power applied.
1. After the overnight “soak” at 30°C (Usually 14~16 hours), the equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter and the individual oscillators is made within a three minute interval after applying to the transmitter.
2. Frequency measurements are made at 10°C interval up to room temperature. At least a period of one and one half-hour is provided to allow stabilization of the equipment at each temperature level.
3. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
4. Frequency measurements are at 10 intervals starting at 30°C up to +50°C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after re-applying power to the transmitter.
5. The artificial load is mounted external to the temperature chamber.

NOTE : The EUT is tested down to the battery endpoint.

# 6. TEST DATA

## 6.1 Effective Radiated Power(E.R.P.)

**Supply Voltage : 3.7VDC**

**Modulation : CDMA**

**■ Reference level**

| Frequency (MHz) | Output (dBm) | Polarization | S/A (dBm) | P/M (dBm) | Ant gain (dBi) | Ref level (dBm) |
|---|---|---|---|---|---|---|
| 835.89 | 25.00 | H | -13.74 | -13.92 | 0.00 | -13.92 |
| | | V | -12.30 | -12.46 | 0.00 | -12.46 |

**■ Result**

| Frequency (MHz) | From EUT Tested level (dBm) | Polarization (H/V) | Azimuth (angle) | ERP (dBm) | ERP (W) | Battery |
|---|---|---|---|---|---|---|
| 824.70 | -15.74 | H2 | 181 | 23.18 | 0.208 | Standard |
| 835.89 | -15.96 | H2 | 181 | 22.96 | 0.198 | Standard |
| 848.31 | -15.29 | H2 | 178 | 23.63 | 0.231 | Standard |

NOTE : Standard batteries are the only battery options for this phone

**Radiated measurements at 3 meters by Substitution Method**

## 6.2 Radiated Spurious & Harmonic measurement
## Field Strength of SPURIOUS Radiation

Operating Frequency : 824.70 MHz(Low), 835.89MHz(Middle), 848.37MHz(High)

Measured Output Power : 23.63 dBm = 0.231 W

Modulation Signal : CDMA

**Limit : 43 + 10log$_{10}$(w) = 36.64 dBc**

■ **Result**

| Channel | Harmonic | Frequency (MHz) | From EUT Tested level (dBm) | POL (H/V) | Result (dBc) |
|---|---|---|---|---|---|
| 1013 | 2 | 1649.40 | -48.75 | V | 62.72 |
| | 3 | 2474.10 | -55.20 | H2 | 63.59 |
| | 4 | 3298.80 | -53.15 | H2 | 58.14 |
| | 5 | 4123.50 | -66.29 | V | 66.46 |
| | 6 | 4948.20 | -65.00 | H1 | 63.19 |
| | 7 | 5772.90 | - | - | - |
| 363 | 2 | 1671.78 | -44.29 | H2 | 58.50 |
| | 3 | 2507.67 | -58.34 | V | 65.68 |
| | 4 | 3343.56 | -50.08 | H2 | 54.83 |
| | 5 | 4179.45 | -65.38 | H2 | 65.46 |
| | 6 | 5015.34 | -64.71 | H2 | 62.99 |
| | 7 | 5851.23 | - | - | - |
| 777 | 2 | 1696.62 | -52.70 | V | 64.20 |
| | 3 | 2544.93 | -60.65 | V | 68.31 |
| | 4 | 3393.24 | -58.70 | V | 63.74 |
| | 5 | 4241.55 | -63.16 | H2 | 63.05 |
| | 6 | 5089.86 | -63.55 | H2 | 61.83 |
| | 7 | 5938.17 | - | - | - |

**Radiated Spurious Emission measurements at 3 meters by Substitution Method**

## 6.3 Radiated Spurious & Harmonic Conversion Table

Date : 03. 10. 14 ~ 10. 15

Test Engineer : E.H. Jung

① Tx Cable loss
② Tx Horn Ant Gain
③ Rx Cable loss + HPF Insertion loss + Attenuator
④ Pre-Amp gain
⑤ Air loss
⑥ Tested Level from EUT
⑦ = ⑥ + ⑤ + ③ - ④
⑧ = ERP +2.14- ⑦

| CH | Har | Frequency (MHz) | ① Tx CL (dB) | ② Horn Gain (dB) | Tx Level @ (S/G 0dBm) | ⑥ Tested Level EUT : H (dBm) | ⑥ Tested Level EUT : V (dBm) | ⑦ Amplitude of Emission EUT : H (dBm) | ⑦ Amplitude of Emission EUT : V (dBm) | ⑧ Result EUT : H (dBc) | ⑧ Result EUT : V (dBc) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1013 | 2 | 1649.40 | 6.59 | 7.21 | 0.62 | -48.16 | -48.75 | -37.47 | -36.95 | 63.24 | 62.72 |
| | 3 | 2474.10 | 8.53 | 8.87 | 0.34 | -55.20 | -56.49 | -37.82 | -38.92 | 63.59 | 64.69 |
| | 4 | 3298.80 | 9.64 | 8.43 | -1.21 | -53.15 | -58.50 | -32.37 | -37.62 | 58.14 | 63.39 |
| | 5 | 4123.50 | 10.20 | 9.89 | -0.31 | -65.95 | -66.29 | -40.99 | -40.69 | 66.76 | 66.46 |
| | 6 | 4948.20 | 12.23 | 10.33 | -1.90 | -65.00 | -65.66 | -37.42 | -38.16 | 63.19 | 63.93 |
| | 7 | 5772.90 | 13.29 | 10.86 | -2.43 | - | - | - | - | - | - |
| 363 | 2 | 1671.78 | 6.58 | 7.21 | 0.63 | -44.29 | -47.72 | -32.73 | -34.78 | 58.50 | 60.55 |
| | 3 | 2507.67 | 8.44 | 8.87 | 0.43 | -59.05 | -58.34 | -40.67 | -39.91 | 66.44 | 65.68 |
| | 4 | 3343.56 | 9.64 | 8.43 | -1.21 | -50.08 | -55.33 | -29.06 | -34.28 | 54.83 | 60.05 |
| | 5 | 4179.45 | 10.39 | 10.20 | -0.19 | -65.38 | -66.73 | -39.69 | -40.51 | 65.46 | 66.28 |
| | 6 | 5015.34 | 12.34 | 10.34 | -2.00 | -64.71 | -66.46 | -37.22 | -38.68 | 62.99 | 64.45 |
| | 7 | 5851.23 | 13.63 | 10.86 | -2.77 | - | - | - | - | - | - |
| 777 | 2 | 1696.62 | 6.59 | 7.21 | 0.62 | -51.63 | -52.70 | -38.56 | -38.43 | 64.33 | 64.20 |
| | 3 | 2544.93 | 8.35 | 8.87 | 0.52 | -60.50 | -60.65 | -42.68 | -42.54 | 68.45 | 68.31 |
| | 4 | 3393.24 | 9.59 | 8.54 | -1.05 | -60.37 | -58.70 | -39.64 | -37.97 | 65.41 | 63.74 |
| | 5 | 4241.55 | 10.54 | 10.20 | -0.34 | -63.16 | -65.54 | -37.28 | -38.50 | 63.05 | 64.27 |
| | 6 | 5089.86 | 12.47 | 10.39 | -2.08 | -63.55 | -66.48 | -36.06 | -39.22 | 61.83 | 64.99 |
| | 7 | 5938.17 | 14.12 | 10.86 | -3.26 | - | - | - | - | - | - |

## 6.4 Frequency Stability

### 6.4.1 Frequency Stability Table

Operating Frequency : 835,890,000 Hz

Channel : 363

Reference Voltage : 3.7VDC

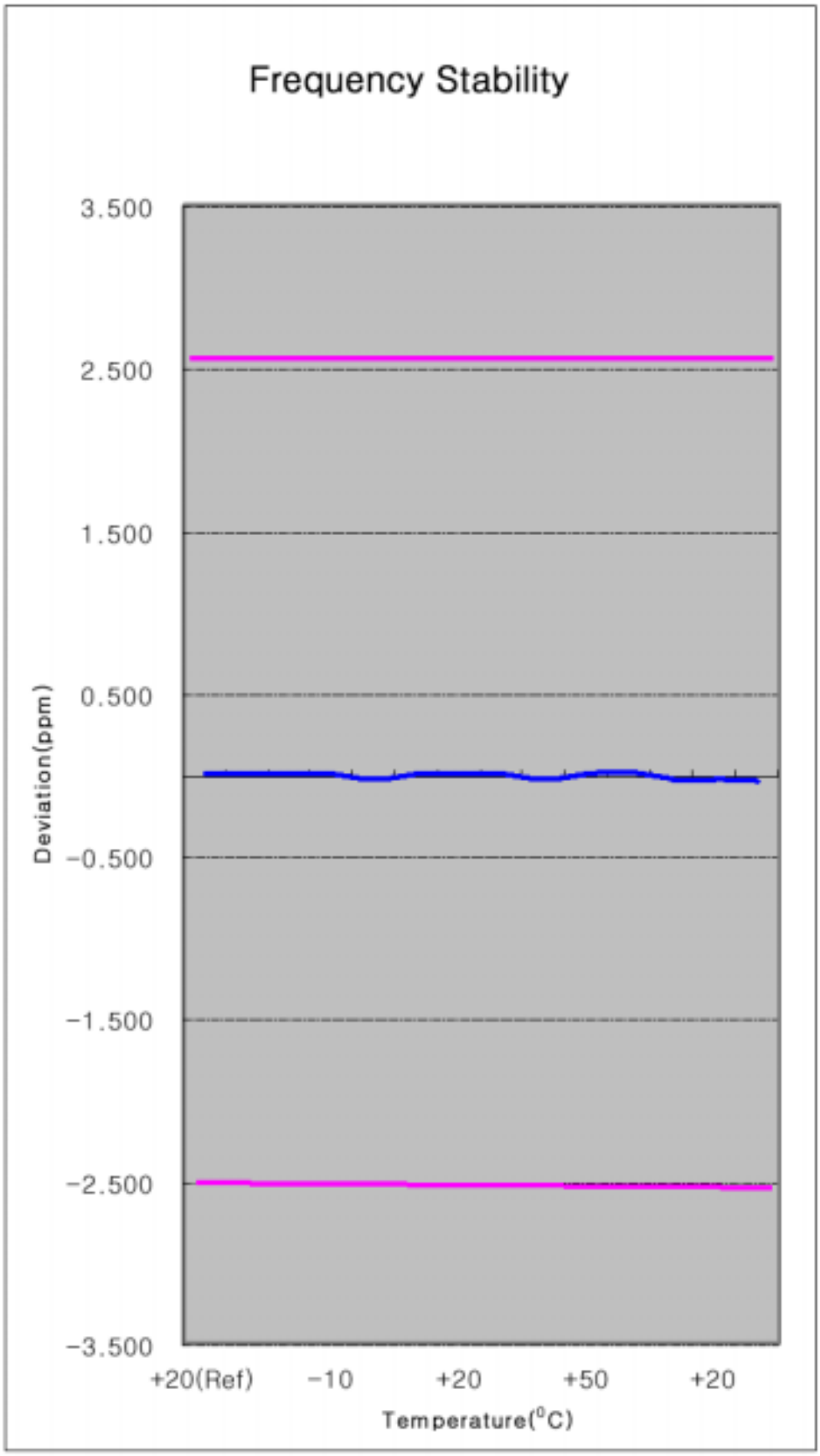
**Deviation Limit : ±0.00025 % or 2.5ppm**

| Voltage (%) | Power (VDC) | Temp. (°C) | Frequency Error (Hz) | Frequency (Hz) | Deviation (%) | ppm |
|---|---|---|---|---|---|---|
| 100% | 3.70 | +20(Ref) | 9.40 | 835,889,978 | 0.000001 | 0.011 |
| 100% | | -30 | 13.60 | 835,890,017 | 0.000002 | 0.016 |
| 100% | | -20 | 16.30 | 835,889,971 | 0.000002 | 0.020 |
| 100% | | -10 | 9.70 | 835,890,021 | 0.000001 | 0.012 |
| 100% | | 0 | -16.70 | 835,889,985 | -0.000002 | -0.020 |
| 100% | | +10 | 17.70 | 835,889,979 | 0.000002 | 0.021 |
| 100% | | +20 | 9.40 | 835,889,977 | 0.000001 | 0.011 |
| 100% | | +30 | 12.50 | 835,889,981 | 0.000001 | 0.015 |
| 100% | | +40 | -13.20 | 835,890,022 | -0.000002 | -0.016 |
| 100% | | +50 | 14.40 | 835,889,960 | 0.000002 | 0.017 |
| 100% | | +60 | 19.20 | 835,889,986 | 0.000002 | 0.023 |
| 85% | 3.15 | +20 | -16.48 | 835,889,912 | -0.000002 | -0.020 |
| 115% | 4.26 | +20 | -13.08 | 835,889,982 | -0.000002 | -0.016 |
| Batt.Endpoint | 2.65 | +20 | -20.90 | 835,889,881 | -0.000003 | -0.025 |

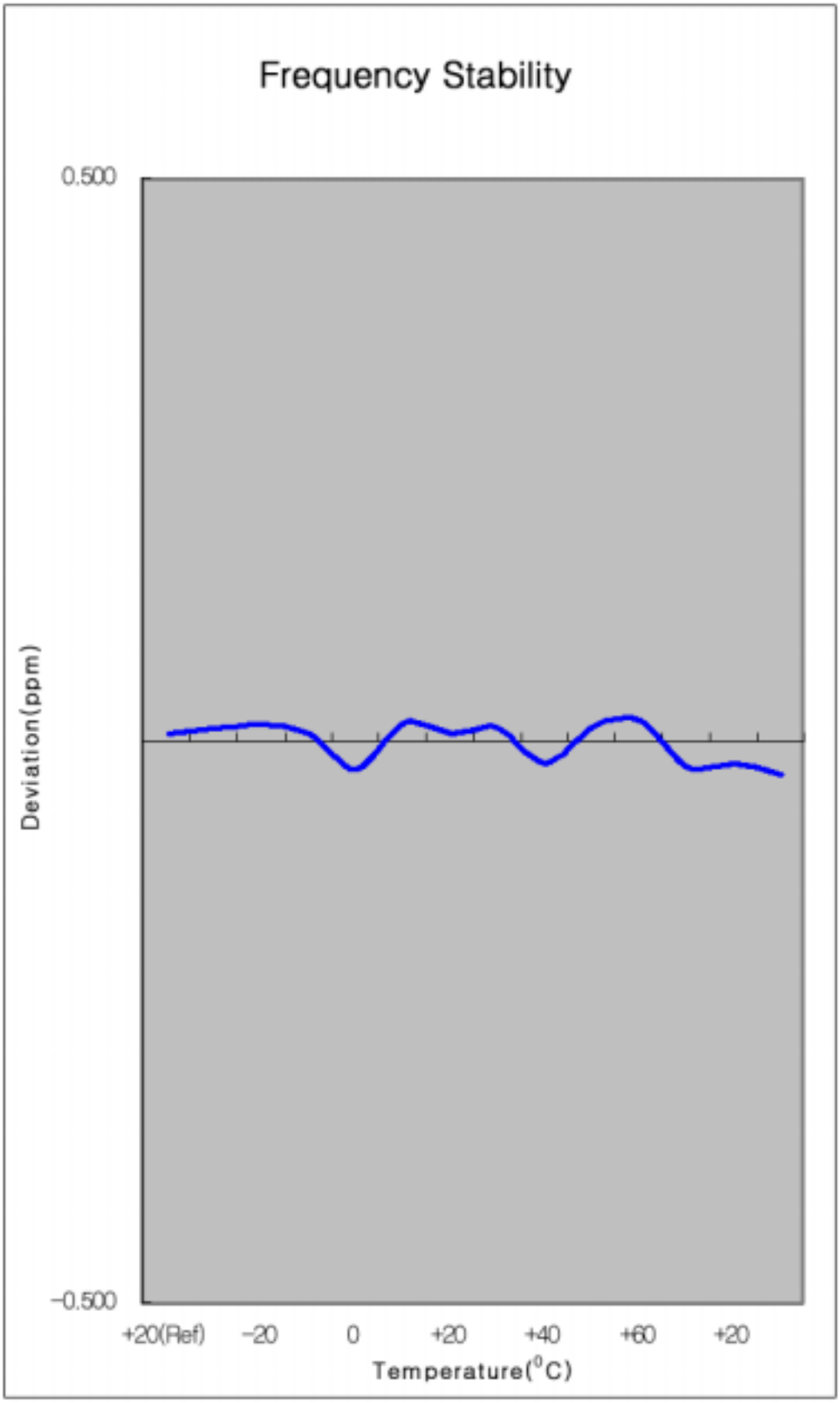
**Note : The temperature is varied from -30 °C to +60 °C using an environmental chamber.**

**The EUT is tested down to the battery end point**

## 6.4.2 Frequency Stability Graph



Zoom In


Frequency Stability
0.500
-0.500
Deviation(ppm)
+20(Ref)
-20
0
+20
+40
+60
+20
Temperature(°C)

# 7. SAMPLE CALCULATION

## 7.1 Emission Designator

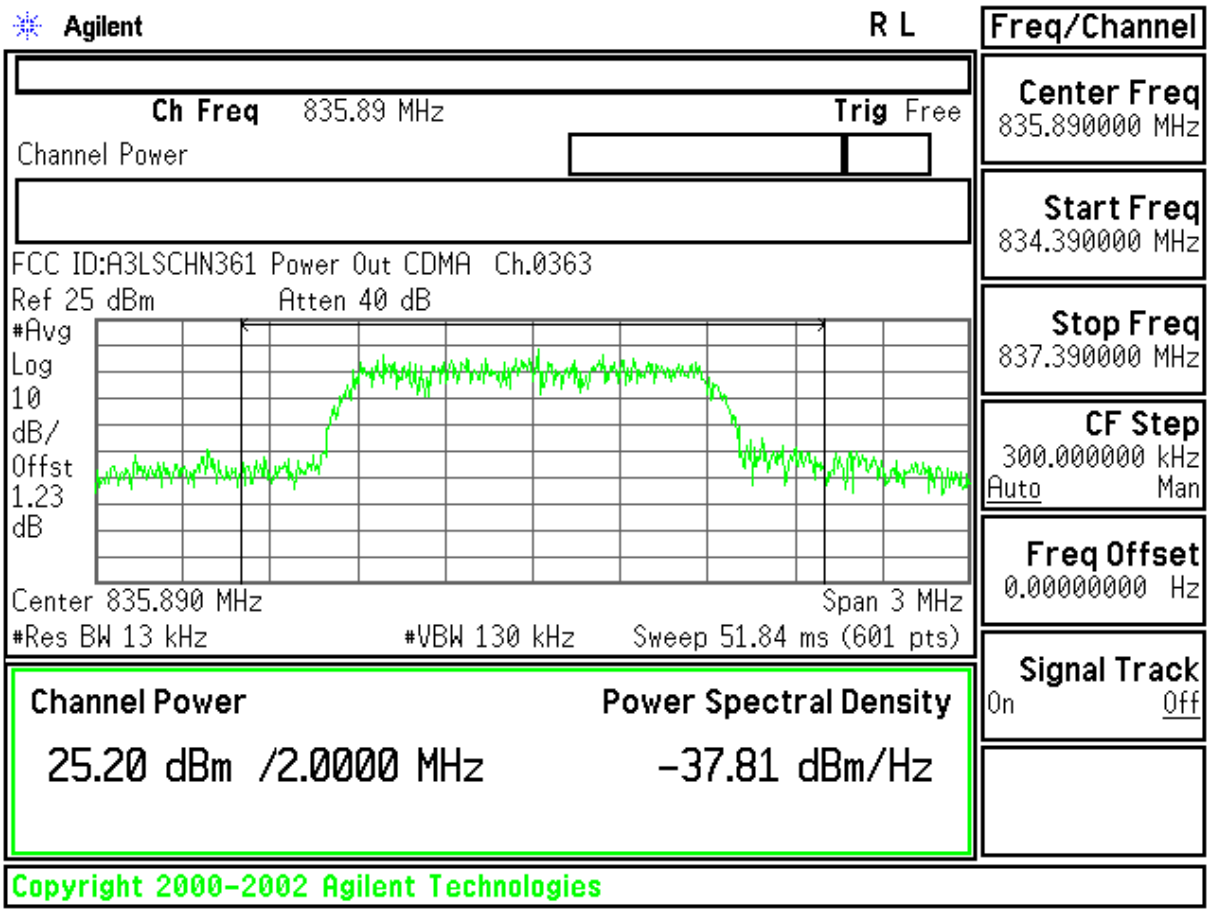
Emission Designator = 1M25F9W

CDMA BW = 1.25MHz
F = Frequency Modulation
9 = Composite Digital Info
W = Combination(Audio/Data)
(Measured at the 99.75% power bandwidth)

# 8. CONCLUSION

The data collected shows that the SAMSUNG Single modulation CDMA Phone FCC ID : A3LSCHN361 complies with all the requirements of Parts 2,22 of the FCC Rules.

## 9. TEST PLOTS


Agilent
R L
Ch Freq 835.89 MHz
Trig Free
Channel Power
FCC ID:A3LSCHN361 Power Out CDMA Ch.0363
Ref 25 dBm
Atten 40 dB
#Avg
Log
10
dB/
Offst
1.23
dB
Center 835.890 MHz
Span 3 MHz
#Res BW 13 kHz
#VBW 130 kHz
Sweep 51.84 ms (601 pts)
Channel Power
25.20 dBm /2.0000 MHz
Power Spectral Density
-37.81 dBm/Hz
Freq/Channel
Center Freq
835.890000 MHz
Start Freq
834.390000 MHz
Stop Freq
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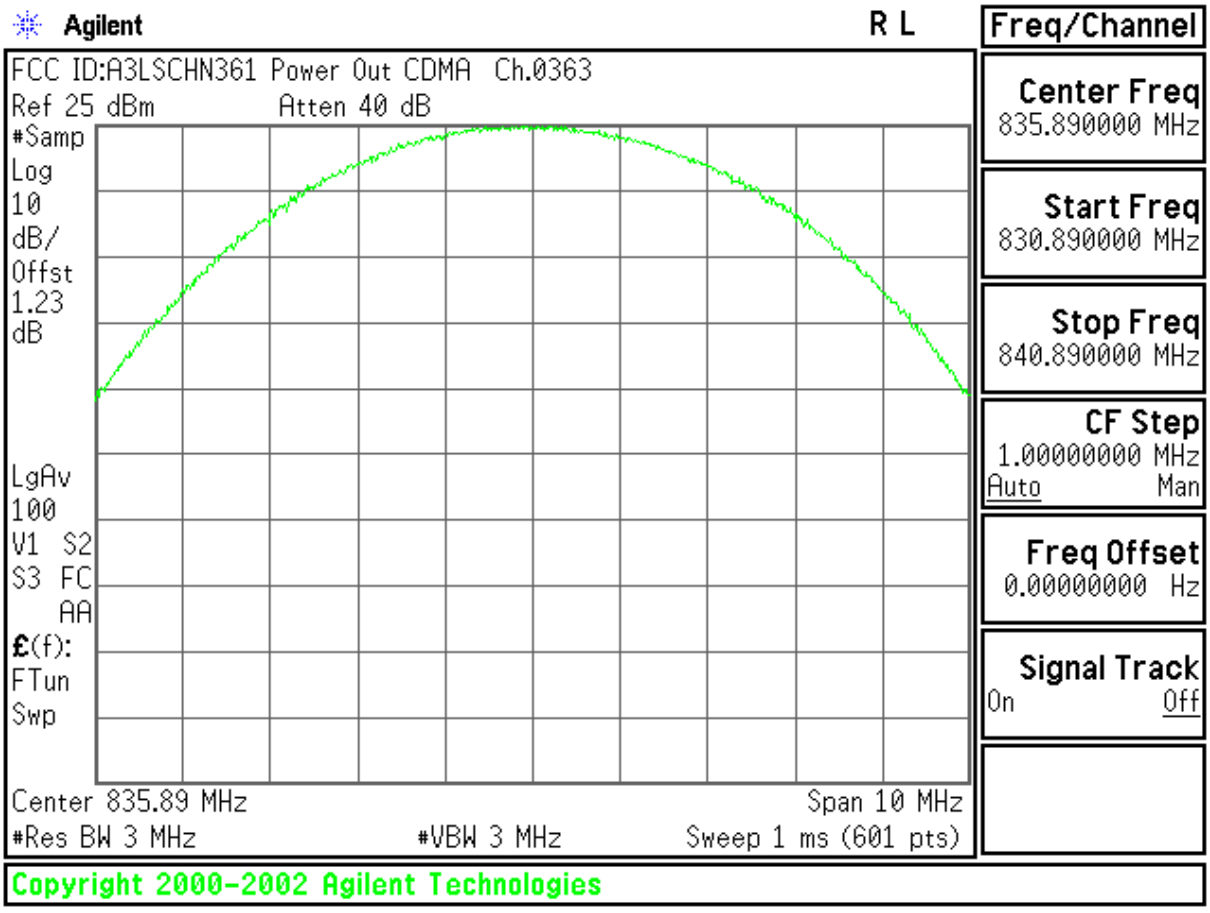
CF Step
300.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2002 Agilent Technologies


Agilent
R L
FCC ID:A3LSCHN361 Power Out CDMA Ch.0363
Ref 25 dBm
Atten 40 dB
#Samp
Log
10
dB/
Offst
1.23
dB
LgAv
100
V1 S2
S3 FC
AA
£(f):
FTun
Swp
Center 835.89 MHz
Span 10 MHz
#Res BW 3 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
Freq/Channel
Center Freq
835.890000 MHz
Start Freq
830.890000 MHz
Stop Freq
840.890000 MHz
CF Step
1.00000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
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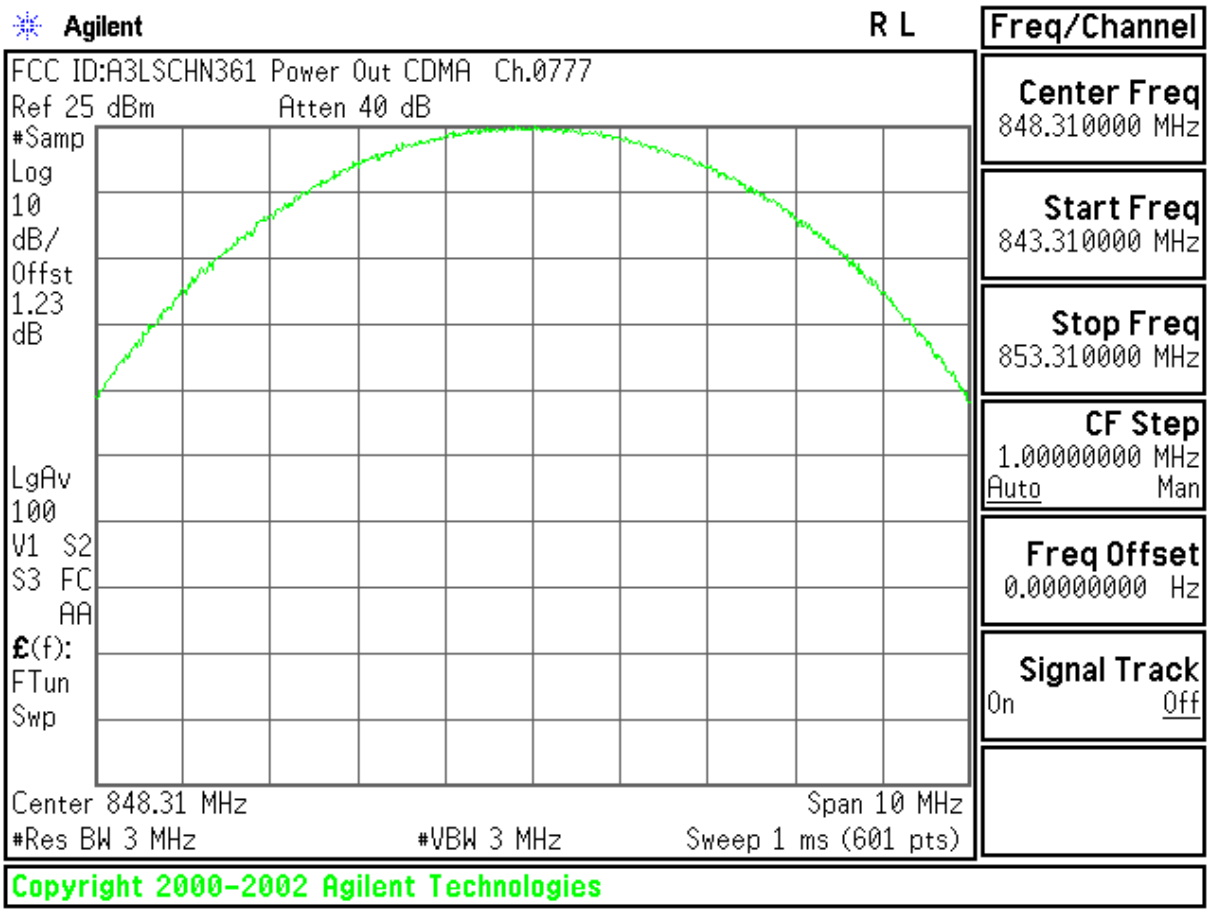
Agilent
R L
FCC ID:A3LSCHN361 Power Out CDMA Ch.0777
Ref 25 dBm
Atten 40 dB
#Samp
Log
10
dB/
Offst
1.23
dB
LgAv
100
V1 S2
S3 FC
AA
£(f):
FTun
Swp
Center 848.31 MHz
Span 10 MHz
#Res BW 3 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
Freq/Channel
Center Freq
848.310000 MHz
Start Freq
843.310000 MHz
Stop Freq
853.310000 MHz
CF Step
1.00000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
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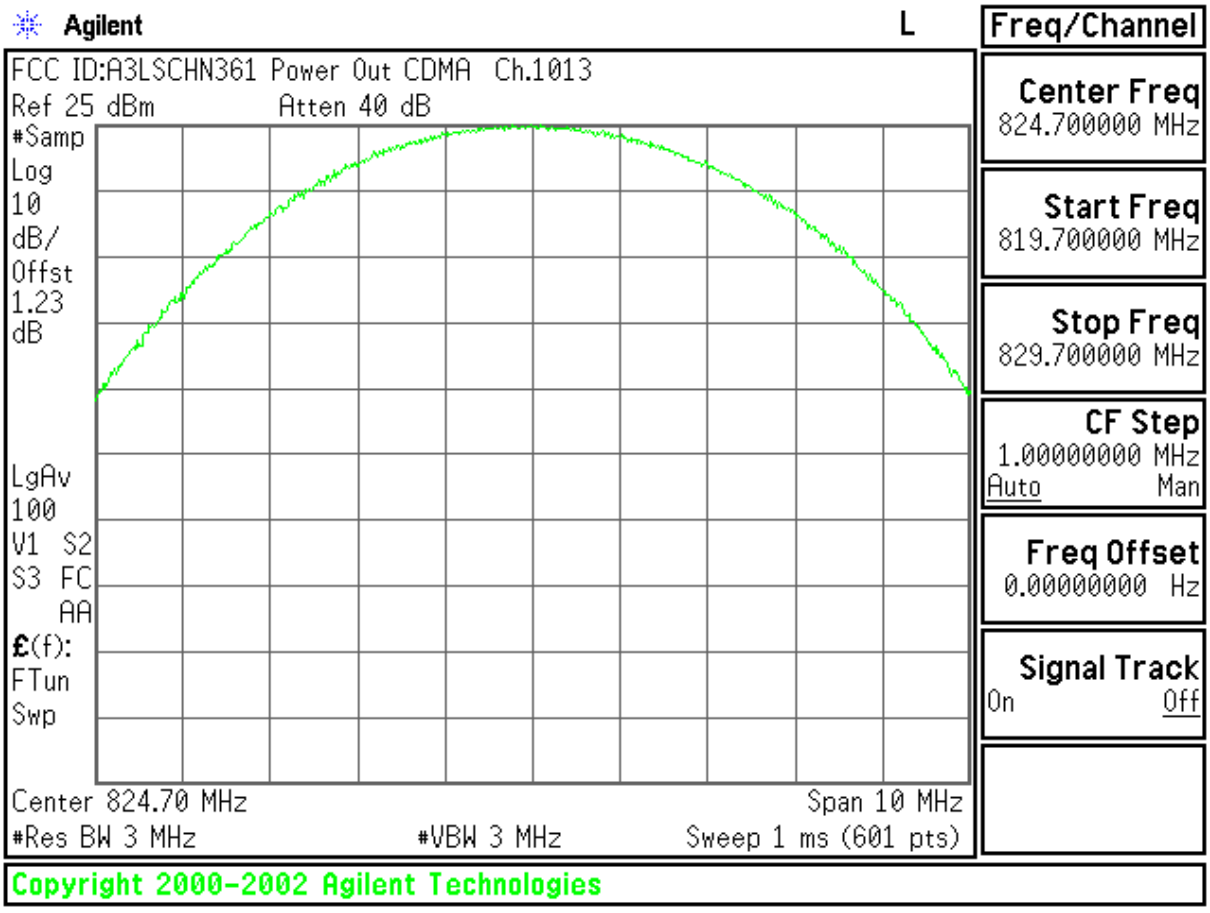
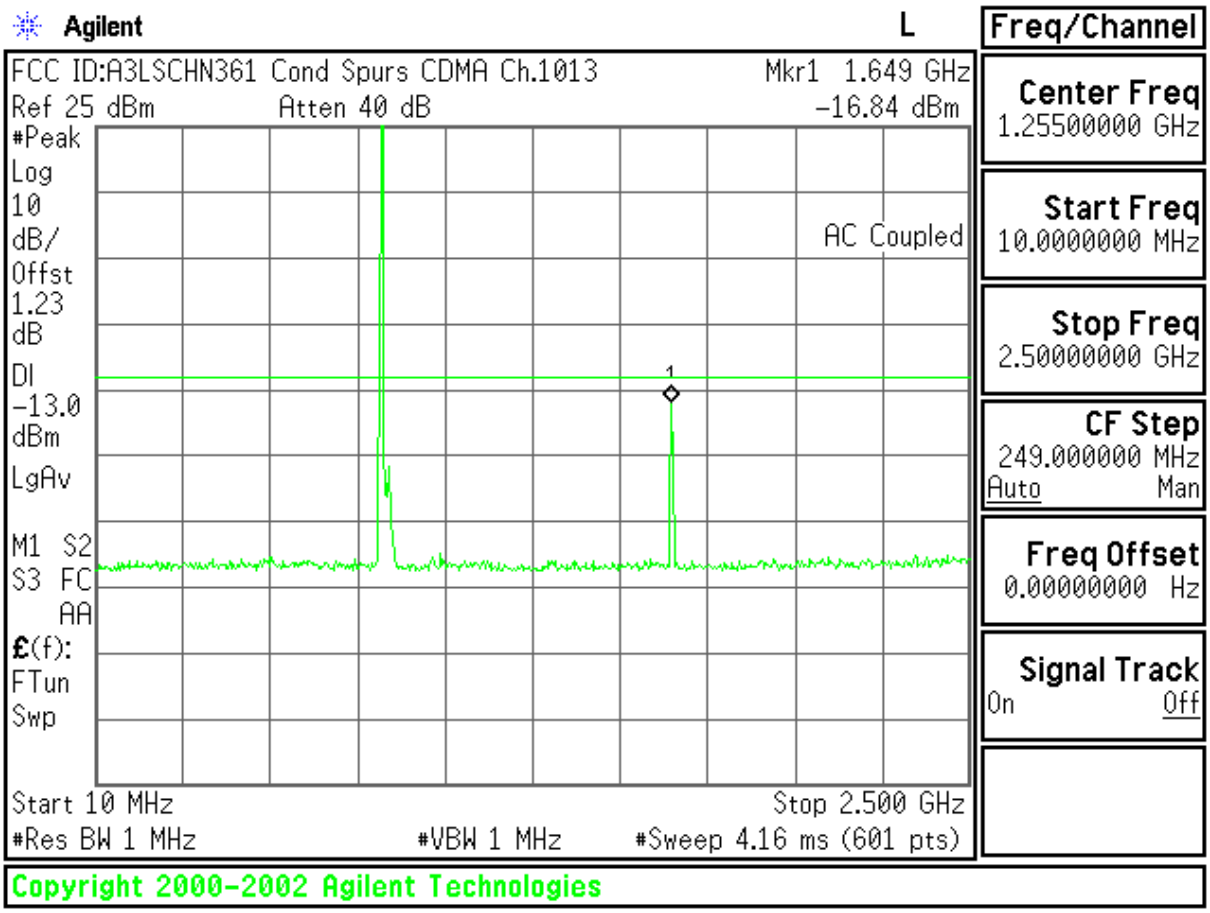
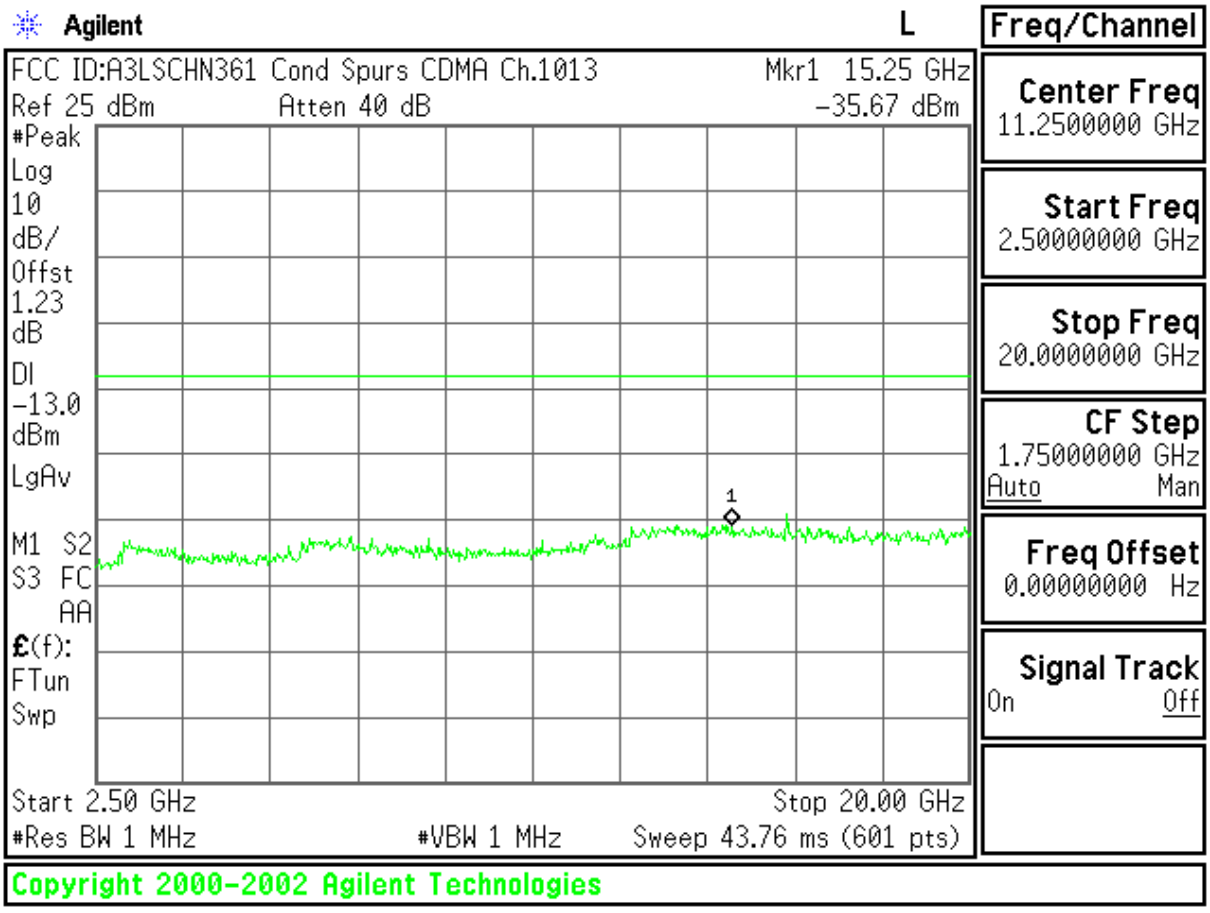
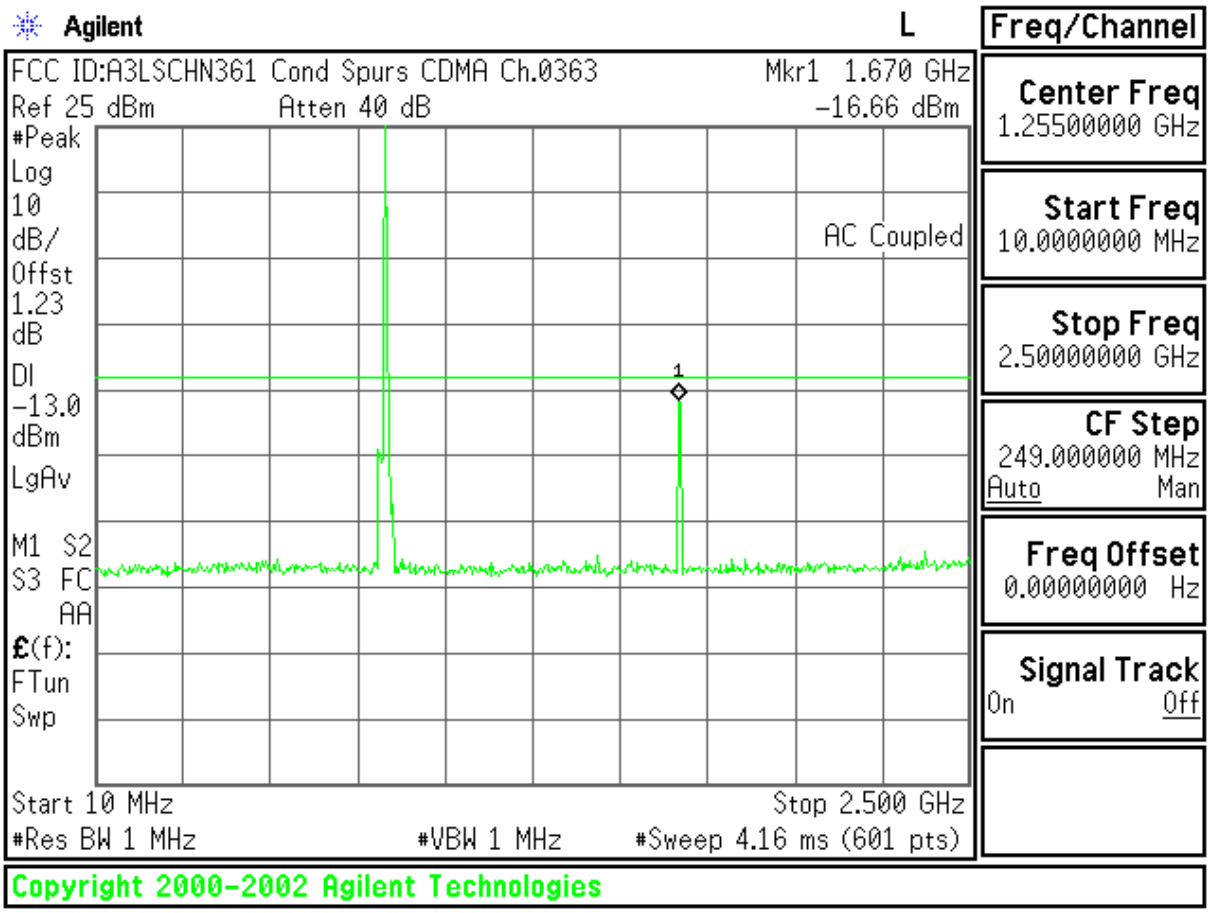
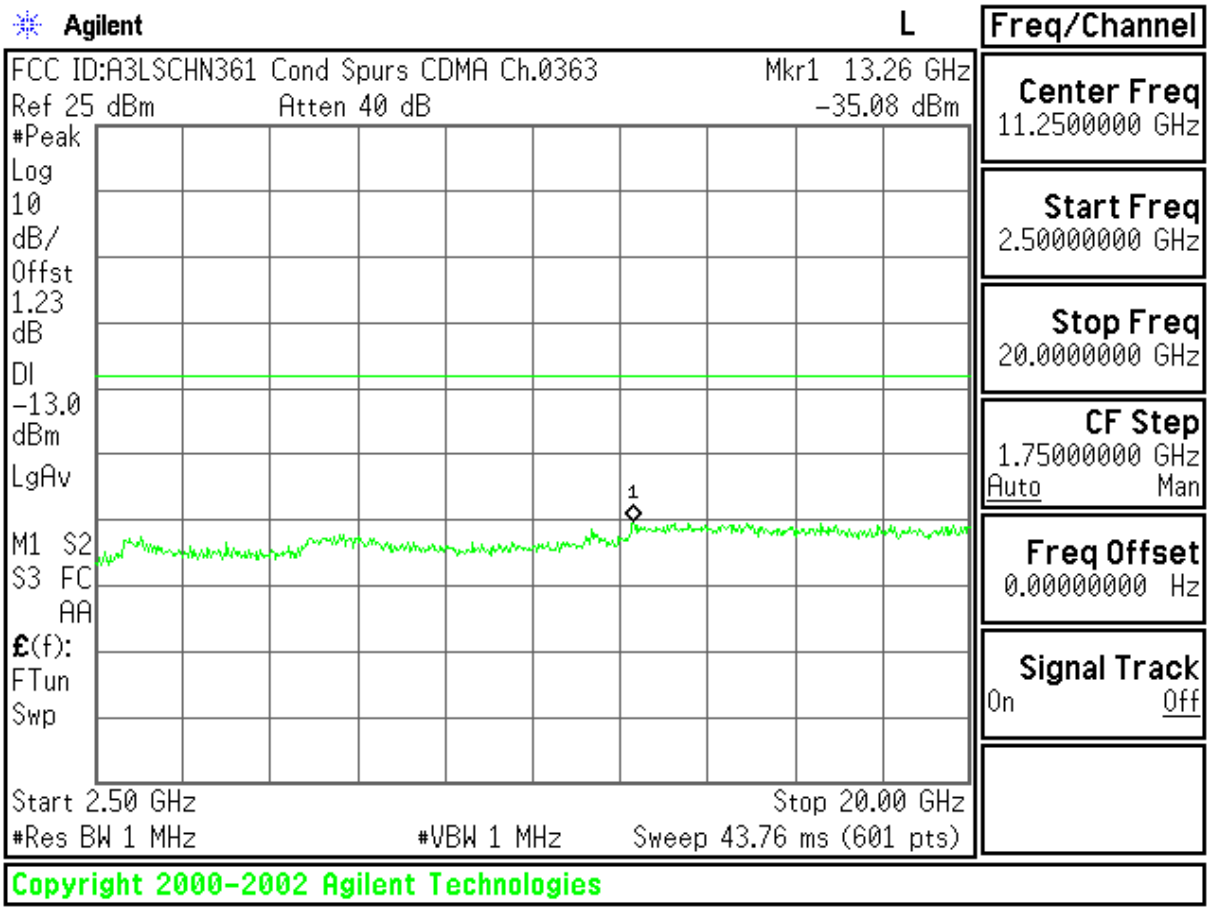
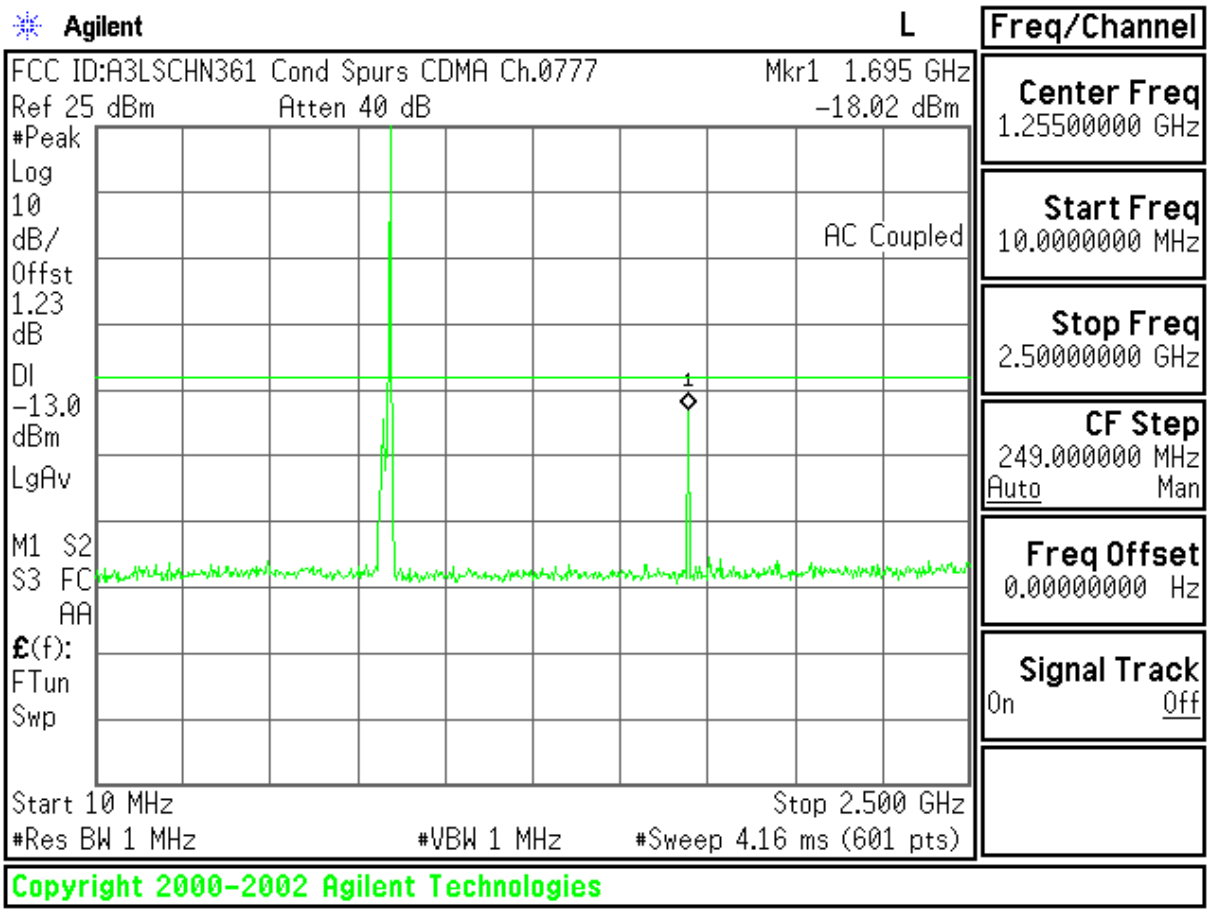

Agilent
L
FCC ID:A3LSCHN361 Power Out CDMA Ch.1013
Ref 25 dBm
Atten 40 dB
#Samp
Log
10
dB/
Offst
1.23
dB
LgAv
100
V1 S2
S3 FC
AA
£(f):
FTun
Swp
Center 824.70 MHz
Span 10 MHz
#Res BW 3 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
Freq/Channel
Center Freq
824.700000 MHz
Start Freq
819.700000 MHz
Stop Freq
829.700000 MHz
CF Step
1.00000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2002 Agilent Technologies

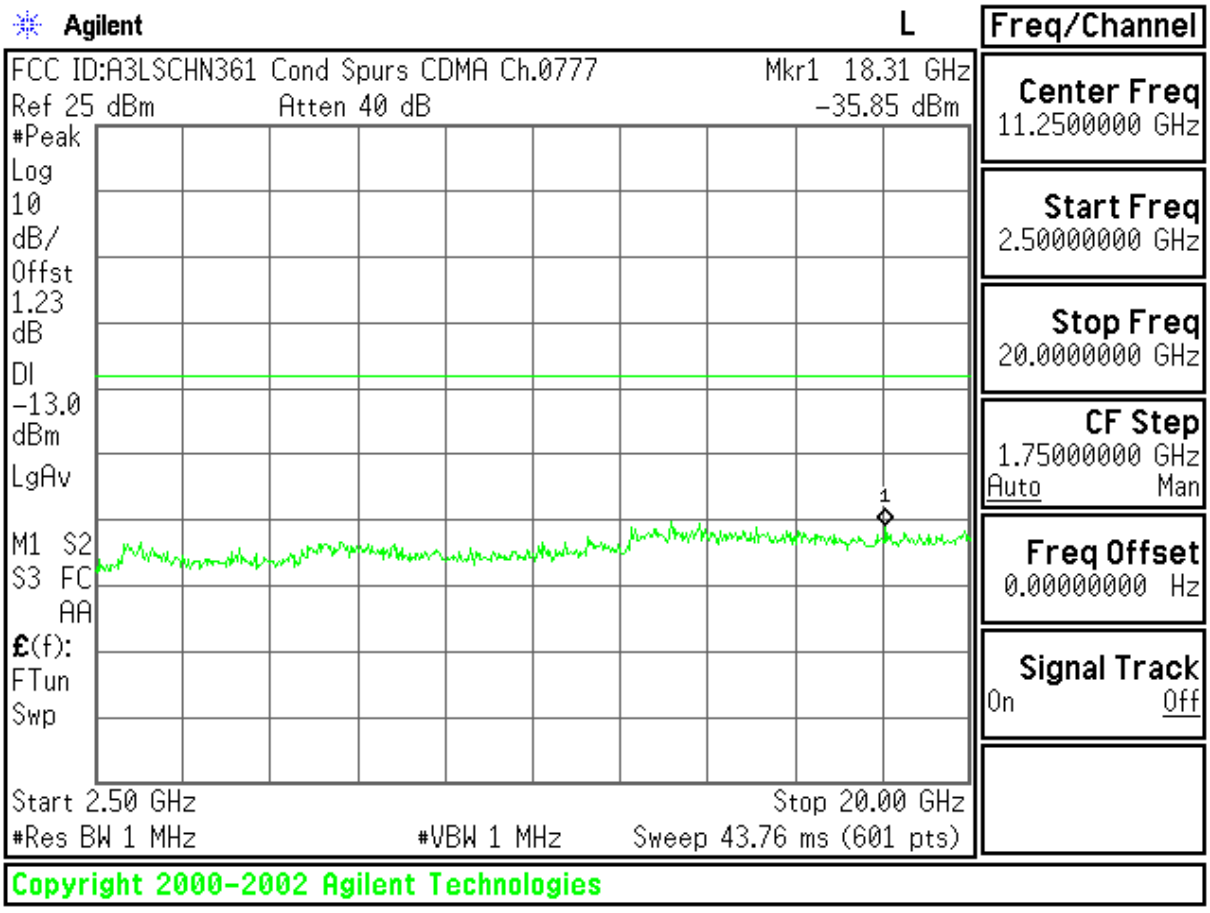

Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.1013
Mkr1 1.649 GHz
Ref 25 dBm
Atten 40 dB
-16.84 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
Swp
AC Coupled
Start 10 MHz
Stop 2.500 GHz
#Res BW 1 MHz
#VBW 1 MHz
#Sweep 4.16 ms (601 pts)
Freq/Channel
Center Freq
1.25500000 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
Copyright 2000-2002 Agilent Technologies

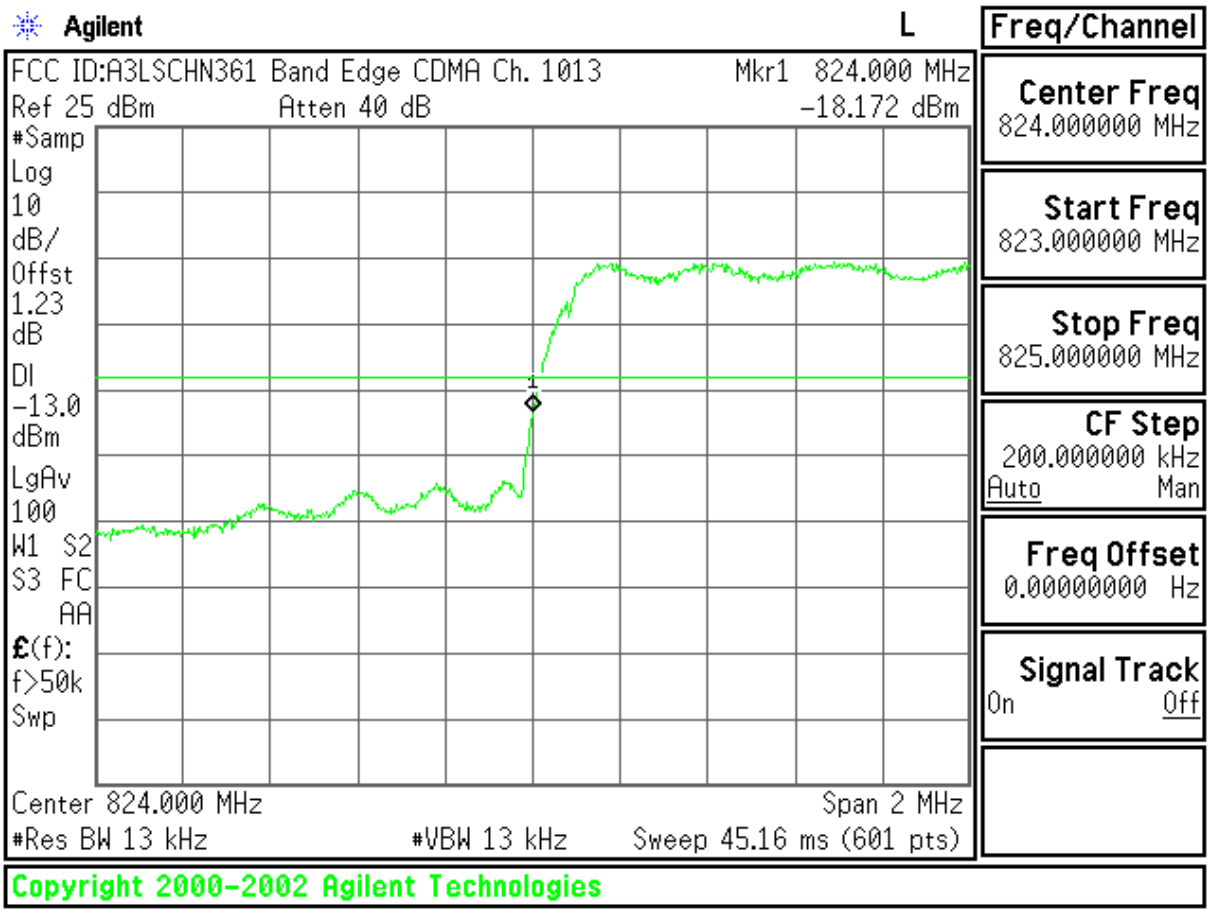

Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.1013
Mkr1 15.25 GHz
Ref 25 dBm
Atten 40 dB
-35.67 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
Swp
Start 2.50 GHz
Stop 20.00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start 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
Copyright 2000-2002 Agilent Technologies

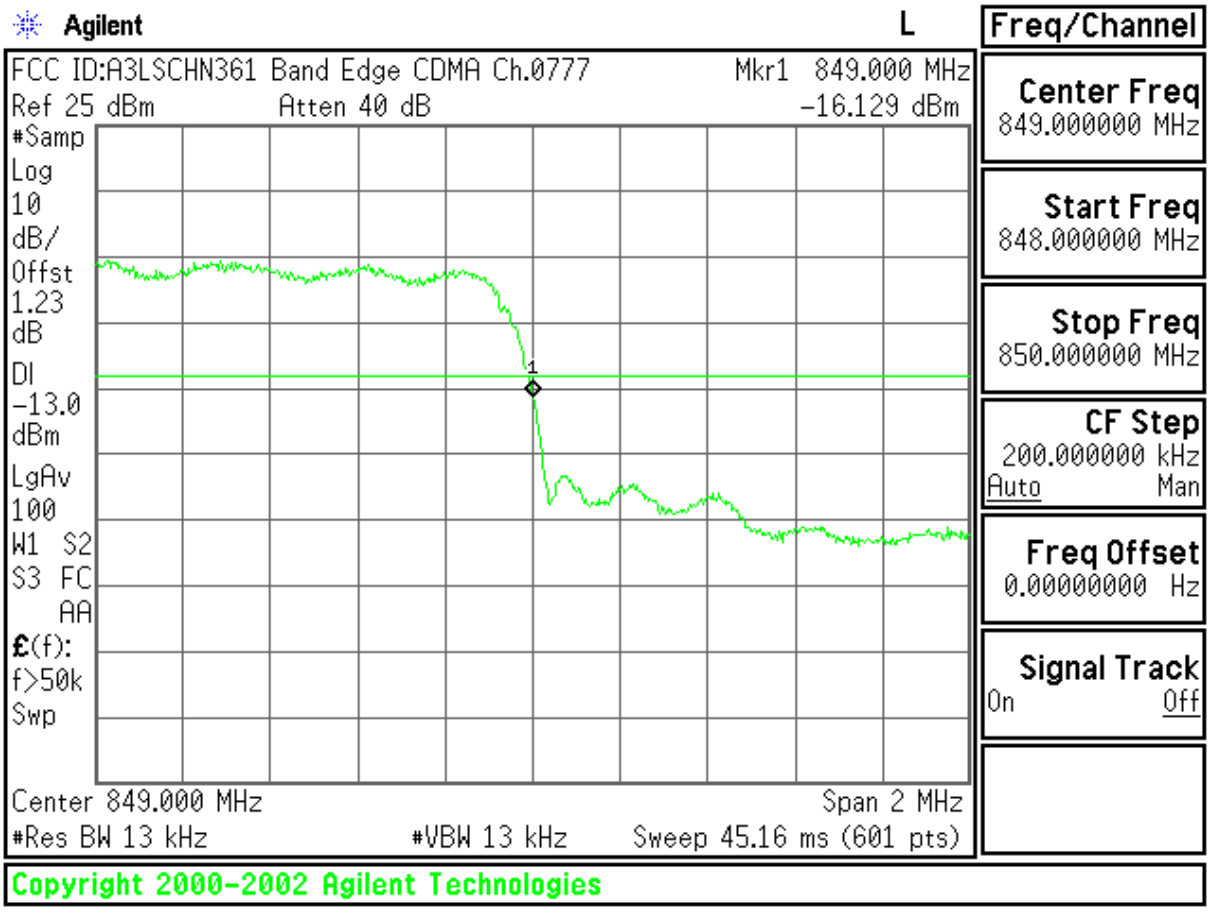

Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.0363
Mkr1 1.670 GHz
Ref 25 dBm
Atten 40 dB
-16.66 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
AC Coupled
M1 S2
S3 FC
AA
£(f):
FTun
Swp
Start 10 MHz
Stop 2.500 GHz
#Res BW 1 MHz
#VBW 1 MHz
#Sweep 4.16 ms (601 pts)
Freq/Channel
Center Freq
1.25500000 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
Copyright 2000-2002 Agilent Technologies


Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.0363
Mkr1 13.26 GHz
Ref 25 dBm
Atten 40 dB
-35.08 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
Swp
Start 2.50 GHz
Stop 20.00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 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
Copyright 2000-2002 Agilent Technologies


Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.0777
Mkr1 1.695 GHz
Ref 25 dBm
Atten 40 dB
-18.02 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
Swp
AC Coupled
Start 10 MHz
Stop 2.500 GHz
#Res BW 1 MHz
#VBW 1 MHz
#Sweep 4.16 ms (601 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
Copyright 2000-2002 Agilent Technologies


Agilent
L
FCC ID:A3LSCHN361 Cond Spurs CDMA Ch.0777
Mkr1 18.31 GHz
Ref 25 dBm
Atten 40 dB
-35.85 dBm
#Peak
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
Swp
Start 2.50 GHz
Stop 20.00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 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
Copyright 2000-2002 Agilent Technologies


Agilent
L
FCC ID:A3LSCHN361 Band Edge CDMA Ch. 1013
Mkr1 824.000 MHz
Ref 25 dBm
Atten 40 dB
-18.172 dBm
#Samp
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
100
W1 S2
S3 FC
AA
£(f):
f>50k
Swp
Center 824.000 MHz
Span 2 MHz
#Res BW 13 kHz
#VBW 13 kHz
Sweep 45.16 ms (601 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
Copyright 2000-2002 Agilent Technologies


Agilent
L
FCC ID:A3LSCHN361 Band Edge CDMA Ch.0777
Mkr1 849.000 MHz
Ref 25 dBm
Atten 40 dB
-16.129 dBm
#Samp
Log
10
dB/
Offst
1.23
dB
Dl
-13.0
dBm
LgAv
100
W1 S2
S3 FC
AA
£(f):
f>50k
Swp
Center 849.000 MHz
Span 2 MHz
#Res BW 13 kHz
#VBW 13 kHz
Sweep 45.16 ms (601 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
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