

# 1.1 Test Data

## 1.2 Effective Radiated Power Output

### A. POWER: Low (Analog Mode)

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)
824.04	-36.450	H	0.003	4.823
836.49	-36.350	H	0.003	5.079
848.97	-36.600	H	0.003	4.985

### B. POWER: High (Analog Mode)



Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.04	-16.450	H	0.304	24.823	Standard
836.49	-16.350	H	0.322	25.079	Standard
848.97	-16.600	H	0.315	24.985	Standard
836.49	-16.450	H	0.315	24.979	Extended

Note: Standard and extended batteries are options for this phone

#### NOTES:

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

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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 the dipole is measured. The ERP is recorded.

PCTEST PT. 22/24 SUPPLEMENT	 <b>FCC MEASUREMENT SUPPLEMENT</b> 			Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.A3L	Test Dates: September 14, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPHA760	Page 1 of 6

## 2.1 Test Data

### 2.2 AMPS Radiated Measurements

#### Field Strength of SPURIOUS Radiation



OPERATING FREQUENCY: 824.04 MHz  
 CHANNEL: 0991 (Low)  
 MEASURED OUTPUT POWER: 25.079 dBm = 0.322 W  
 MODULATION SIGNAL: FM (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  38.08 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1648.08	-42.58	6.10	-36.48	H	61.6
2472.12	-45.68	6.70	-38.98	H	64.1
3296.16	-47.68	6.80	-40.88	H	66.0
4120.20	-71.53	6.50	-65.03	H	90.1
4944.24	-79.38	7.00	-72.38	H	97.5

#### NOTES:

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

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

PCTEST PT. 22/24 SUPPLEMENT	 <b>FCC MEASUREMENT SUPPLEMENT</b> 			Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.A3L	Test Dates: September 14, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPA760	Page 2 of 6

## 2.1 Test Data (Continued)

### 2.3 AMPS Radiated Measurements

#### Field Strength of SPURIOUS Radiation


OPERATING FREQUENCY: 836.49 MHz  
 CHANNEL: 0383 (Mid)  
 MEASURED OUTPUT POWER: 25.079 dBm = 0.322 W  
 MODULATION SIGNAL: FM (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  38.08 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1672.98	-41.98	6.10	-35.88	H	61.0
2509.47	-44.88	6.70	-38.18	H	63.3
3345.96	-44.48	6.80	-37.68	H	62.8
4182.45	-70.68	6.50	-64.18	H	89.3
5018.94	-77.78	7.00	-70.78	H	95.9

#### NOTES:

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

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

PCTEST PT. 22/24 SUPPLEMENT	FCC MEASUREMENT SUPPLEMENT			 Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.A3L	Test Dates: September 14, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPA760	Page 3 of 6

## 2.1 Test Data (Continued)

### 2.4 AMPS Radiated Measurements

#### Field Strength of SPURIOUS Radiation



OPERATING FREQUENCY: 848.97 MHz  
 CHANNEL: 0799 (High)  
 MEASURED OUTPUT POWER: 25.079 dBm = 0.322 W  
 MODULATION SIGNAL: FM (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  38.08 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1697.94	-42.88	6.10	-36.78	V	61.9
2546.91	-44.58	6.70	-37.88	V	63.0
3395.88	-43.28	6.80	-36.48	V	61.6
4244.85	-75.78	6.50	-69.28	V	94.4

#### NOTES:

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

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

PCTEST PT. 22/24 SUPPLEMENT	 <b>FCC MEASUREMENT SUPPLEMENT</b> 			Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.A3L	Test Dates: September 14, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPA760	Page 4 of 6

# 3.1 Test Data

## 3.2 FREQUENCY STABILITY (AMPS)

OPERATING FREQUENCY: 836,490,006 Hz

CHANNEL: 383

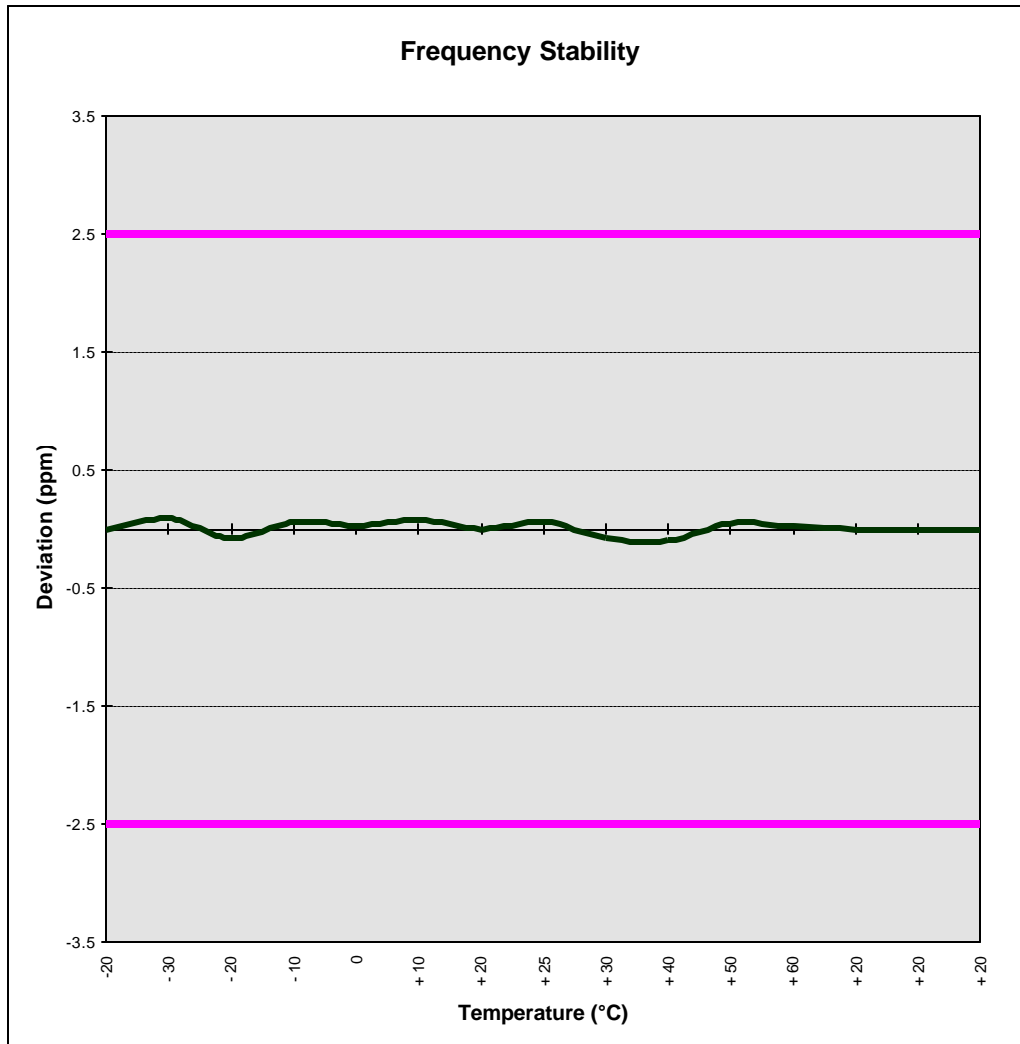
REFERENCE VOLTAGE: 3.7 VDC

DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

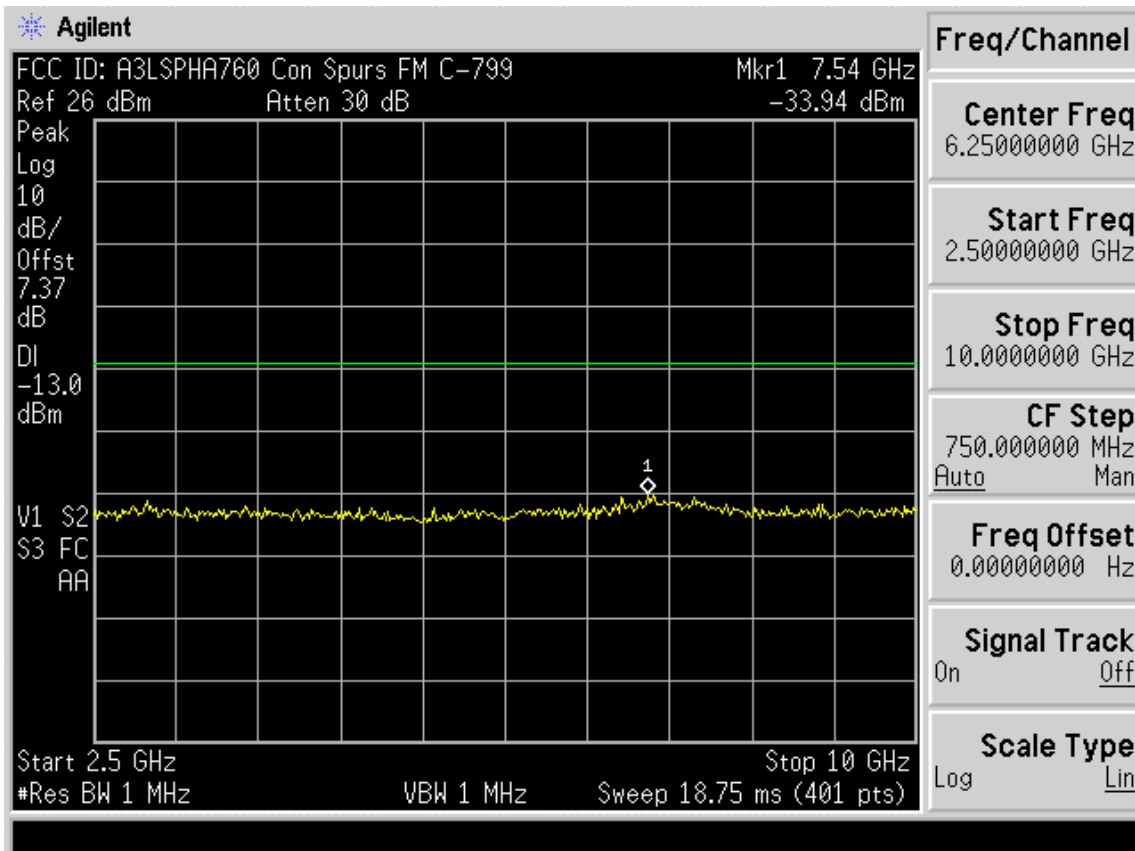
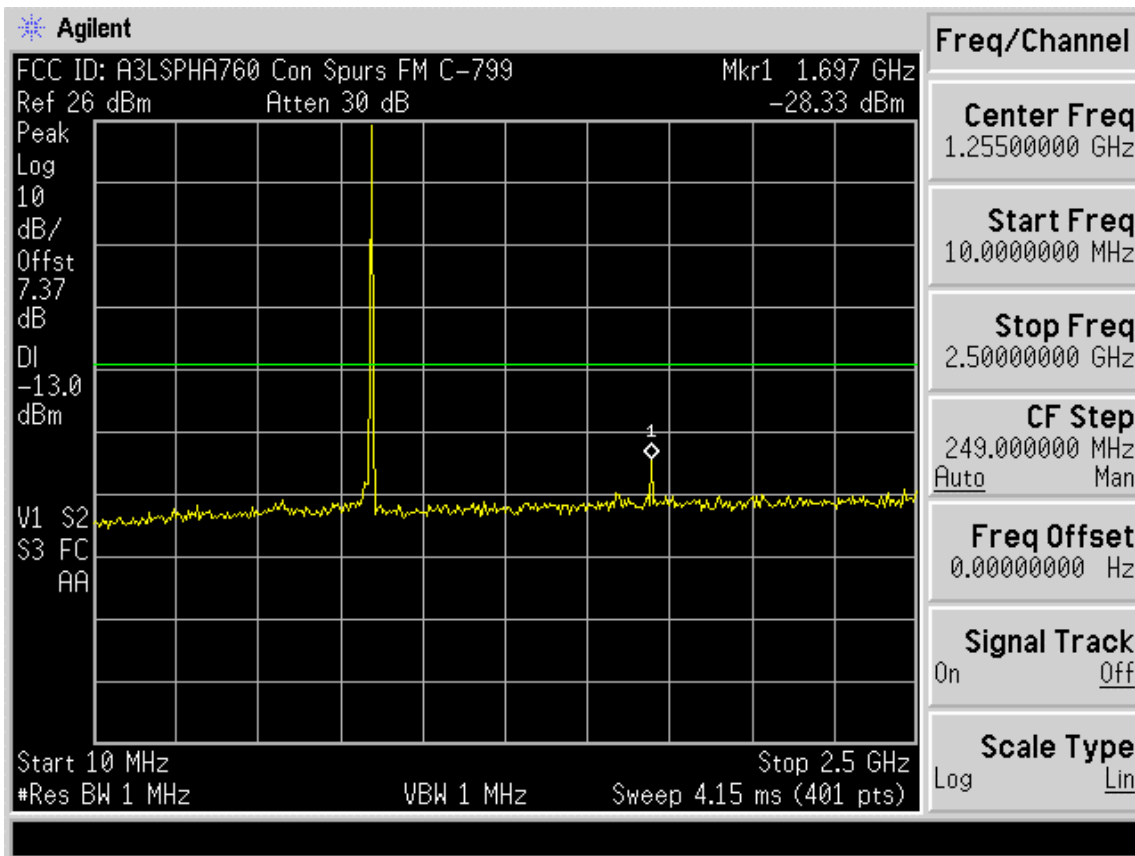
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQ. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	836,490,006	0.000000
100 %		- 30	836,489,931	0.000009
100 %		- 20	836,490,073	-0.000008
100 %		- 10	836,489,956	0.000006
100 %		0	836,489,981	0.000003
100 %		+ 10	836,489,939	0.000008
100 %		+ 20	836,490,006	0.000000
100 %		+ 25	836,489,956	0.000006
100 %		+ 30	836,490,073	-0.000008
100 %		+ 40	836,490,090	-0.000010
100 %		+ 50	836,489,964	0.000005
100 %		+ 60	836,489,989	0.000002
85 %		3.17	+ 20	836,490,006
115 %	4.26	+ 20	836,490,006	0.000000
BATT. ENDPOINT	3.15	+ 20	836,490,006	0.000000

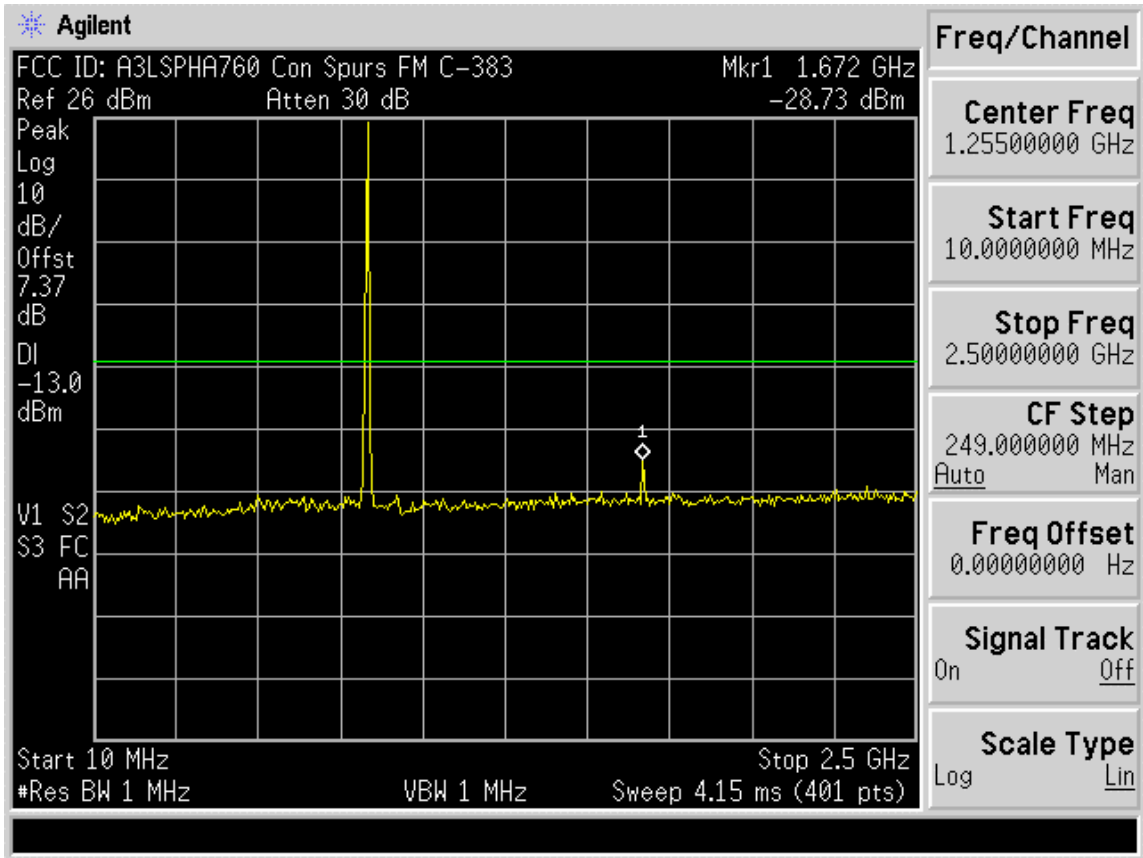
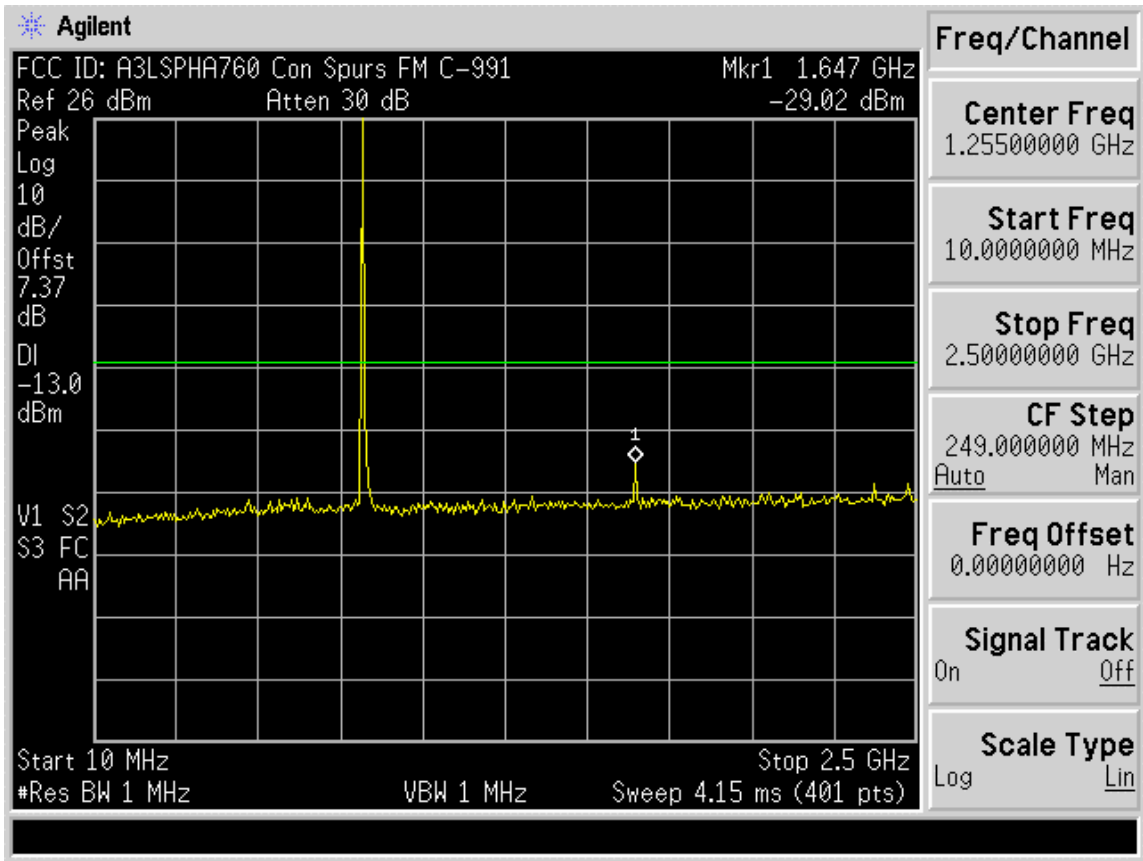
## 3.1 Test Data (Continued)

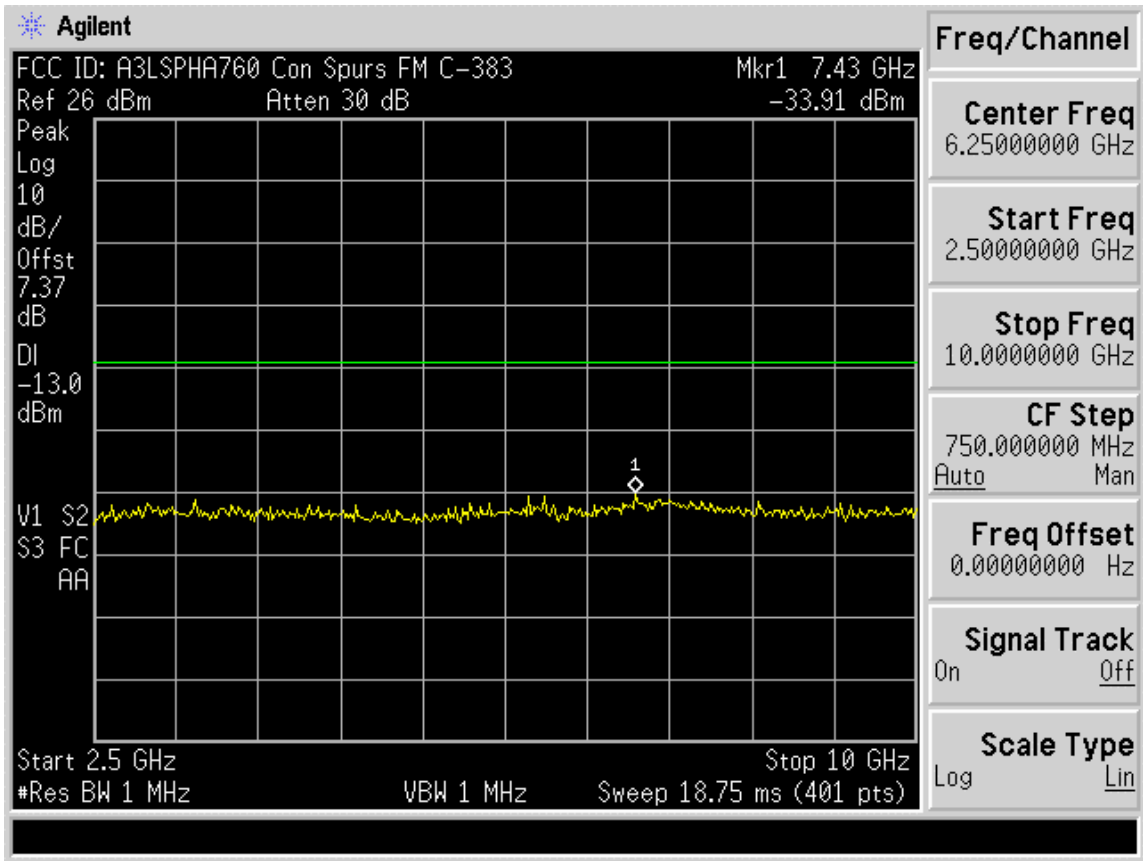
### 3.3 FREQUENCY STABILITY (AMPS)



<b>PCTEST</b> PT. 22/24 SUPPLEMENT Test Report S/N: 22/24.240913531.A3L	<b>FCC MEASUREMENT SUPPLEMENT</b>			Reviewed By: Quality Manager
	Test Dates: September 14, 2004	Phone Type: Tri-Mode Dual-Band		FCC ID: A3LSPA760







# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA760

SAMSUNG

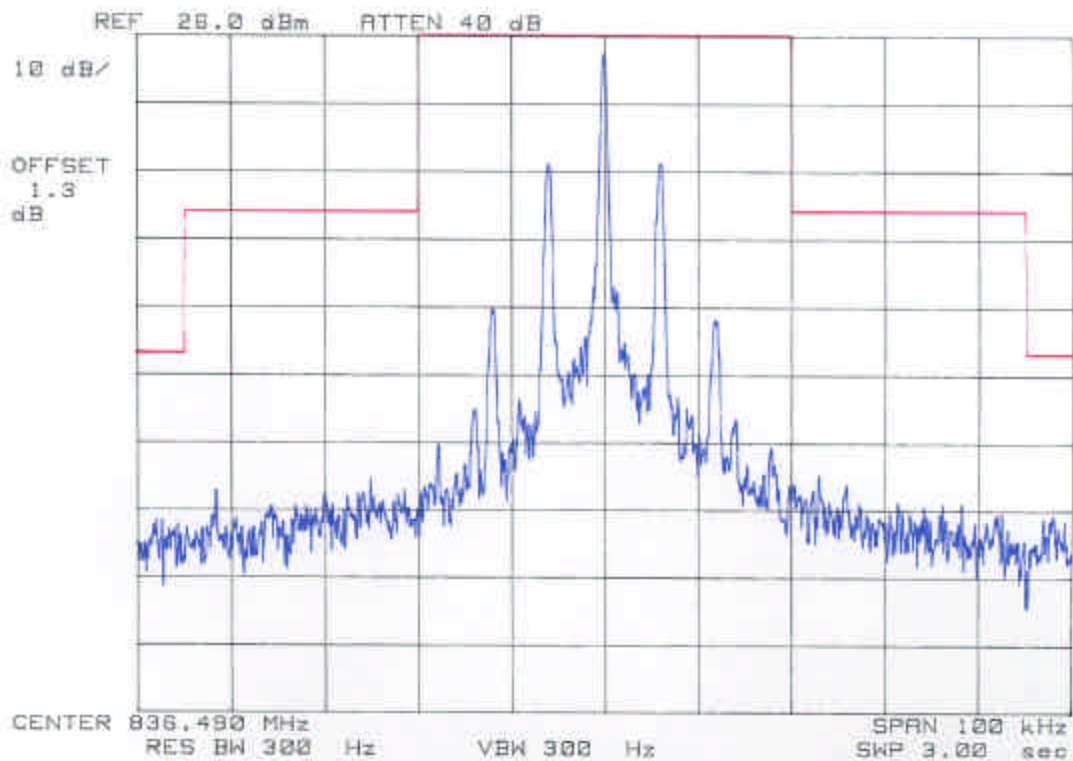
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:SAT



# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA760

SAMSUNG

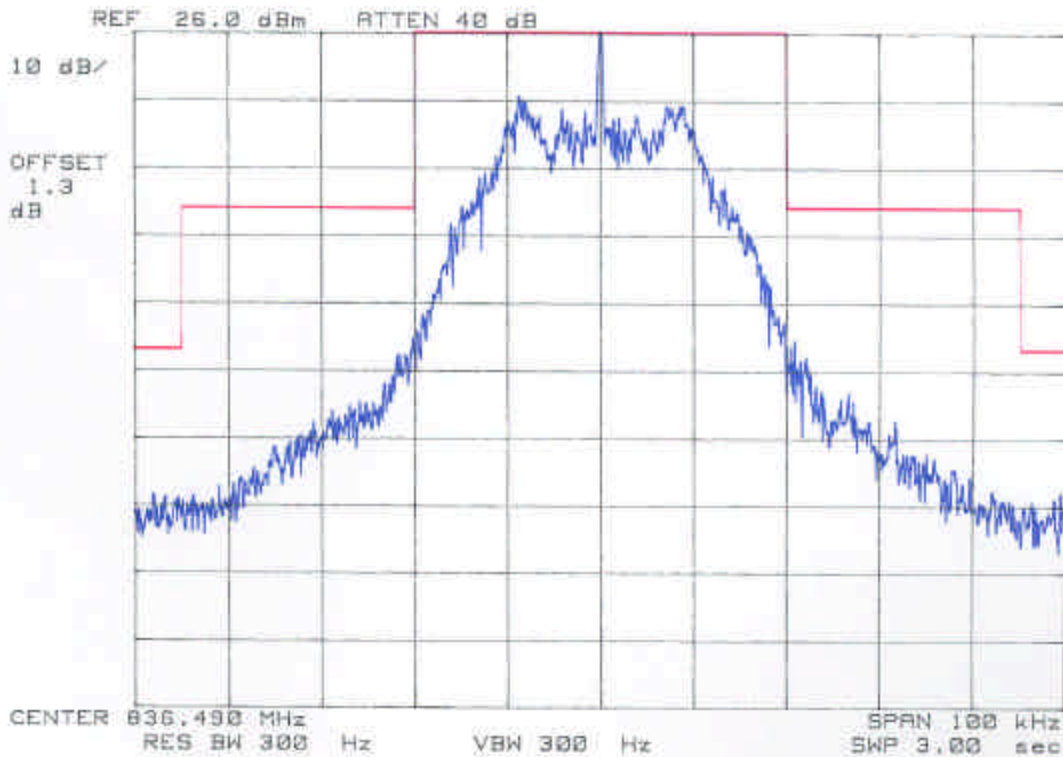
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:SAT + DTMF



# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID: A3LSPHA760

SAMSUNG

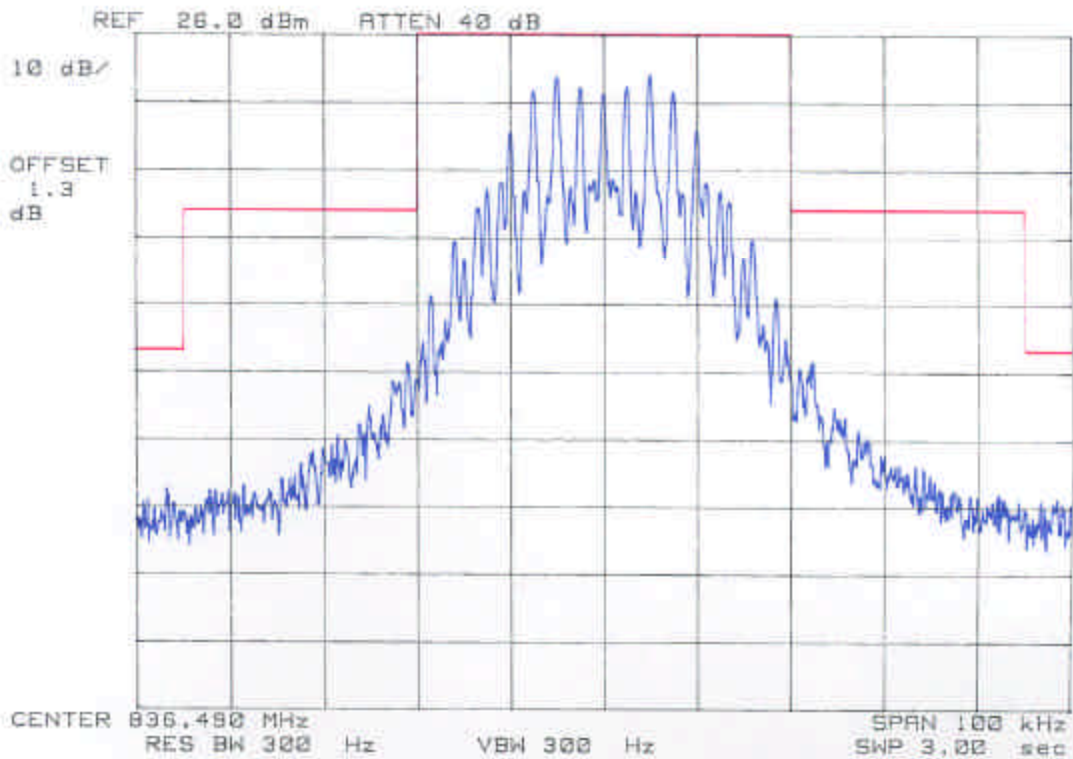
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode: SAT + Voice



# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA760

SAMSUNG

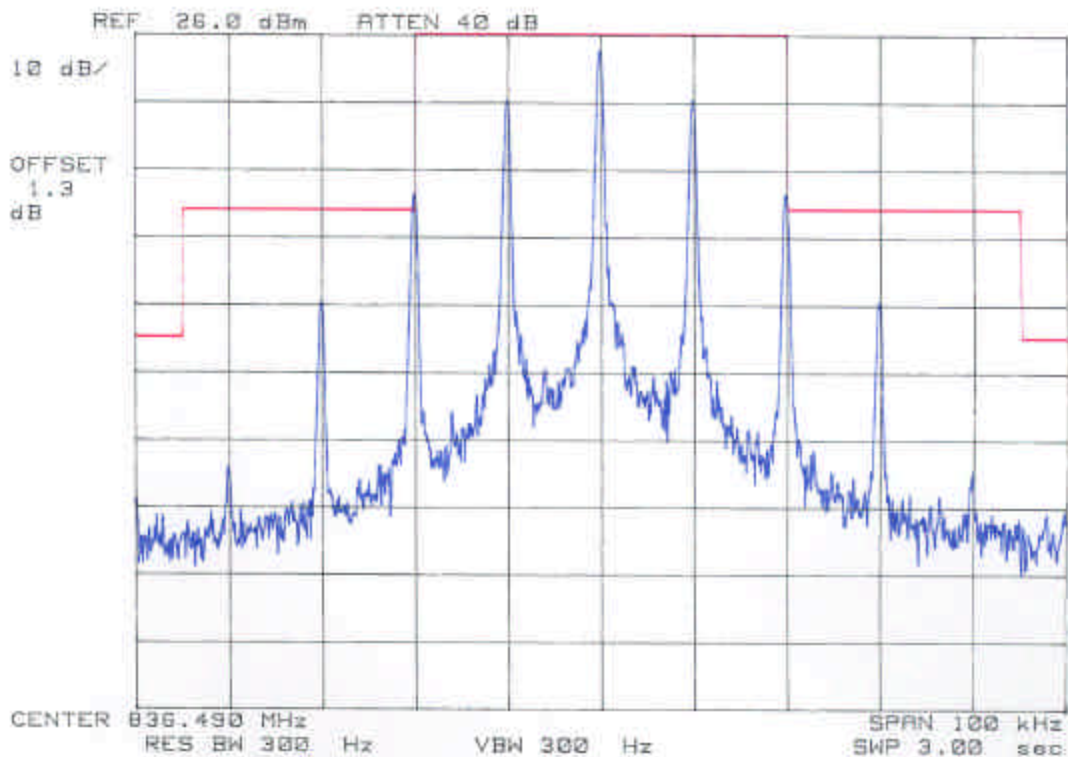
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:ST



# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA760

SAMSUNG

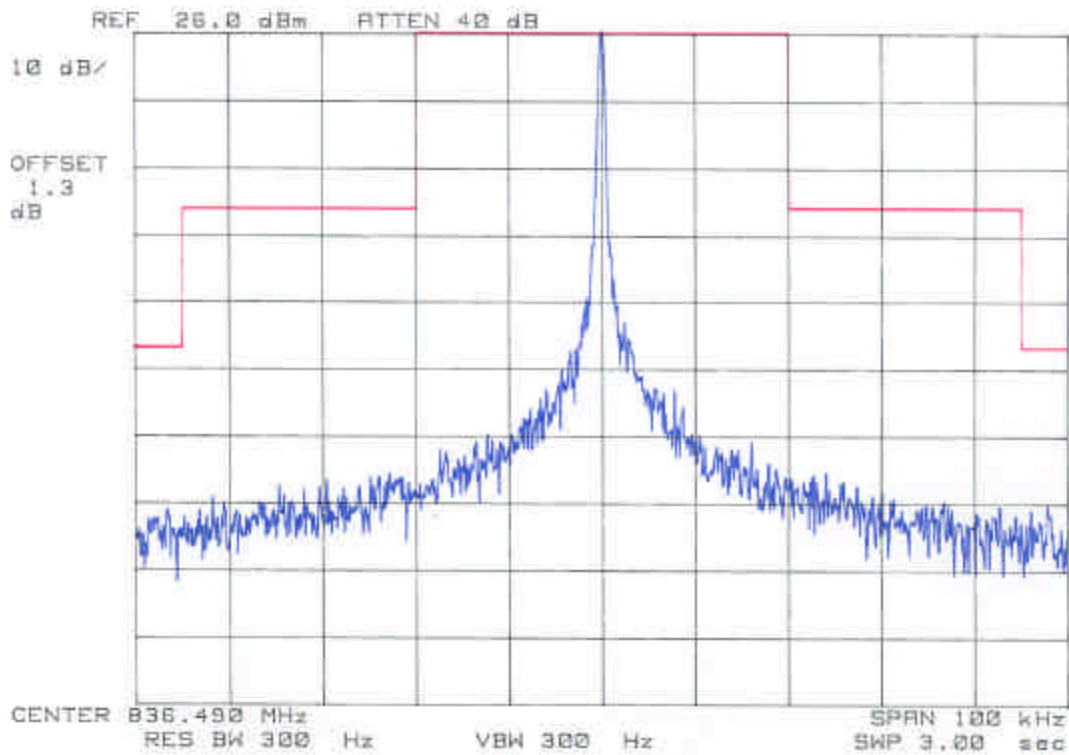
TRI-MODE PHONE

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:A3LSPHA760

SAMSUNG

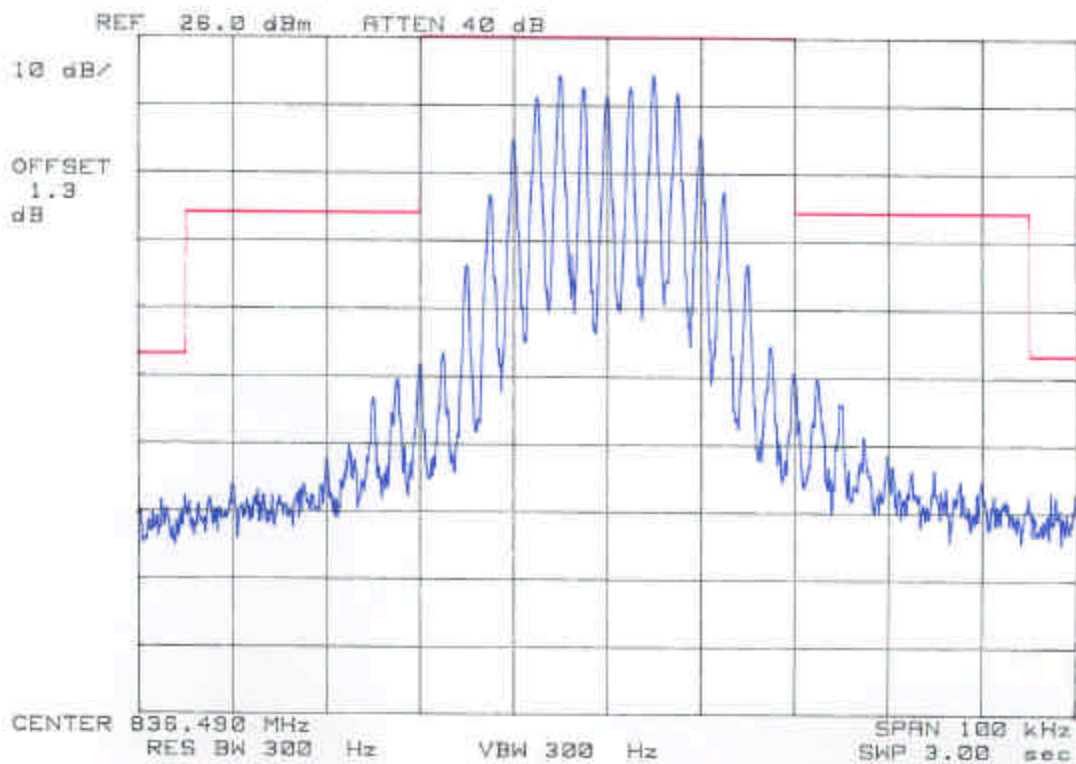
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:Voice



# PCTEST Engineering Lab.

## SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA760

SAMSUNG

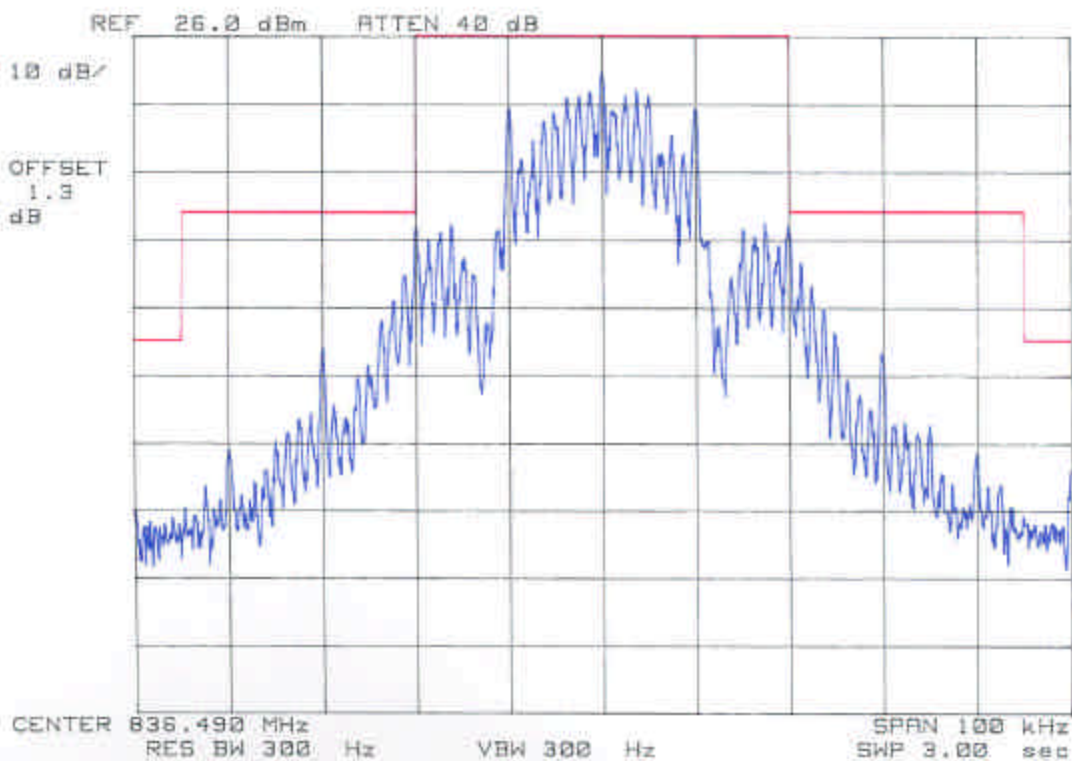
TRI-MODE PHONE

FM CHANNEL 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:Wide Band Data



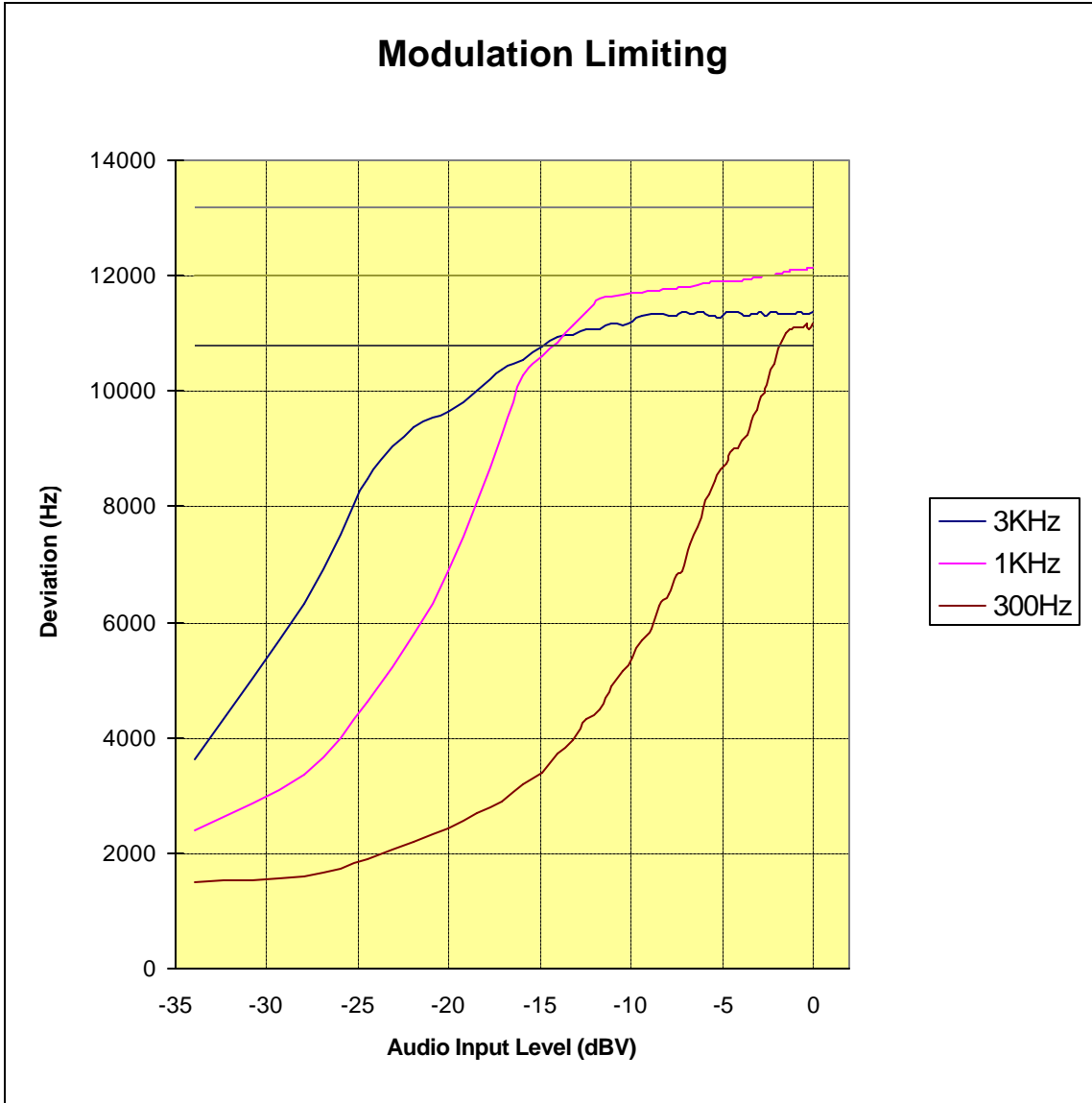
**PCTEST Engineering Lab., Inc.**

**SUBJECT:** Modulation Characteristics  
FCC Part 24/22

Test Report No.: 22/24.240913531.A3L  
Test Date: 09.14.2004

**EUT:** Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)  
**Model:** SPH-A760  
**FCC ID:** A3LSPHA760

**REFERENCE:** 1 kHz = 0 dB



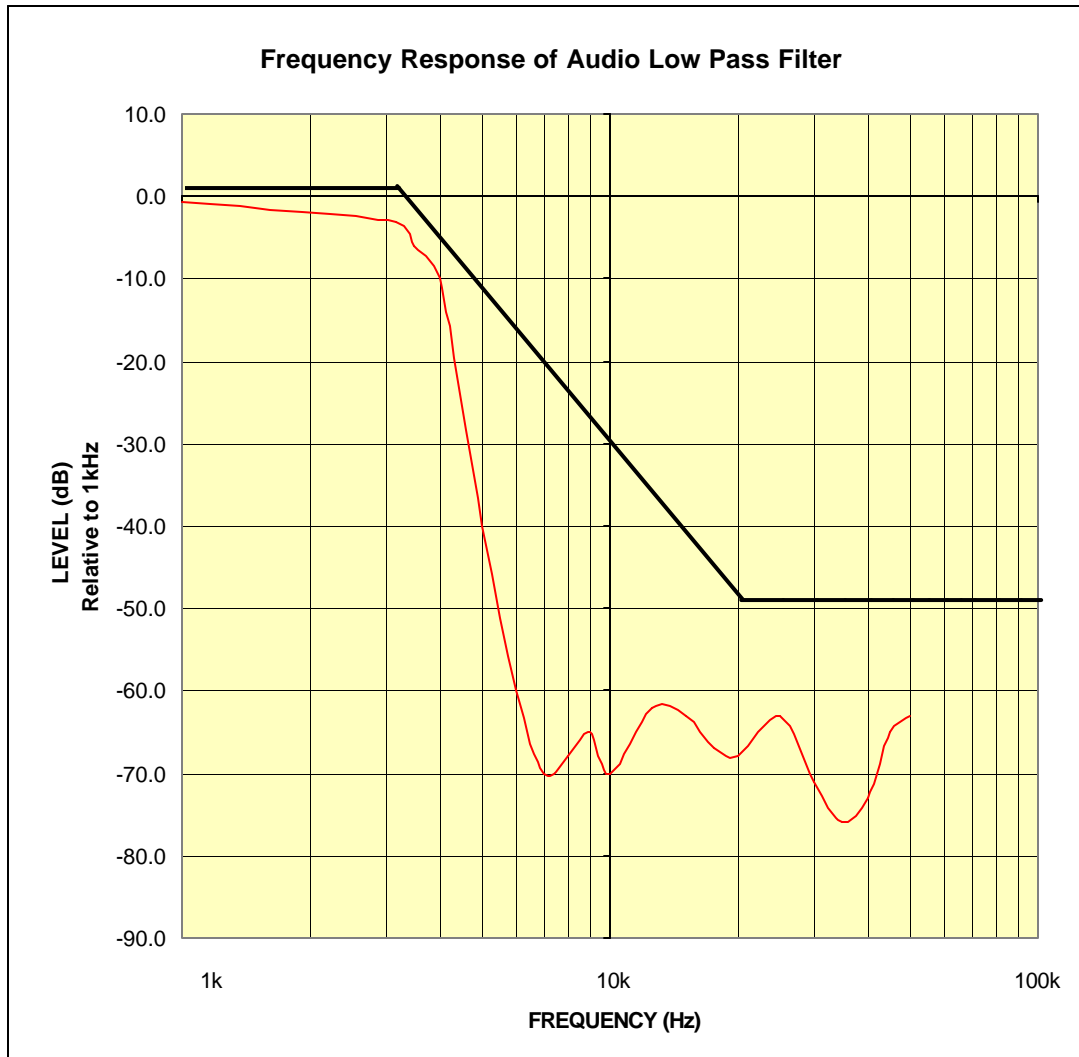
**PCTEST Engineering Lab., Inc.**

**SUBJECT:** Modulation Characteristics  
FCC Part 24/22

Test Report No.: 22/24.240913531.A3L  
Test Date: 09.14.2004

**EUT:** Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)  
**Model:** SPH-A760  
**FCC ID:** A3LSPHA760

**REFERENCE:** 1 kHz = 0 dB



**PCTEST Engineering Lab., Inc.**

**SUBJECT:** Modulation Characteristics  
FCC Part 24/22

Test Report No.: 22/24.240913531.A3L  
Test Date: 09.14.2004

**EUT:** Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)  
**Model:** SPH-A760  
**FCC ID:** A3LSPHA760

**REFERENCE:** 1 kHz = 0 dB

