

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	-34.700	H	0.005	6.573
836.49	-34.750	H	0.005	6.679
848.97	-35.100	H	0.004	6.485

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

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.04	-14.700	H	0.454	26.573	Standard
836.49	-14.750	H	0.466	26.679	Standard
848.97	-15.100	H	0.445	26.485	Standard

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	FCC MEASUREMENT SUPPLEMENT			Reviewed By: Quality Manager
Test Report S/N: 22/24.240806483.A3L	Test Dates: August 6, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPHA740	Page 1 of 6

2.1 Test Data

2.2 A MPS Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 824.04 MHz
 CHANNEL: 0991 (Low)
 MEASURED OUTPUT POWER: 26.679 dBm = 0.466 W
 MODULATION SIGNAL: FM (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 39.68 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1648.08	-40.98	6.10	-34.88	H	61.6
2472.12	-44.98	6.70	-38.28	H	65.0
3296.16	-48.68	6.80	-41.88	H	68.6
4120.20	-63.58	6.50	-57.08	H	83.8
4944.24	-71.38	7.00	-64.38	H	91.1

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: 22/24.240806483.A3L	Test Dates: August 6, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPHA740	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: 26.679 dBm = 0.466 W
 MODULATION SIGNAL: FM (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 39.68 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1672.98	-40.18	6.10	-34.08	H	60.8
2509.47	-41.98	6.70	-35.28	H	62.0
3345.96	-54.18	6.80	-47.38	H	74.1
4182.45	-66.38	6.50	-59.88	H	86.6
5018.94	-70.38	7.00	-63.38	H	90.1

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.

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Test Report S/N: 22/24.240806483.A3L	Test Dates: August 6, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPA740	Page 3 of 6

2.1 Test Data (Continued)

2.4 A MPS Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 848.97 MHz
 CHANNEL: 0799 (High)
 MEASURED OUTPUT POWER: 26.679 dBm = 0.466 W
 MODULATION SIGNAL: FM (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 39.68 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1697.94	-42.18	6.10	-36.08	H	62.8
2546.91	-55.98	6.70	-49.28	H	76.0
3395.88	-63.78	6.80	-56.98	H	83.7
4244.85	-67.78	6.50	-61.28	H	88.0
5093.82	-73.98	7.00	-66.98	H	93.7

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
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3.1 Test Data

3.2 FREQUENCY STABILITY (AMPS)

OPERATING FREQUENCY: 836,490,004 Hz

CHANNEL: 383

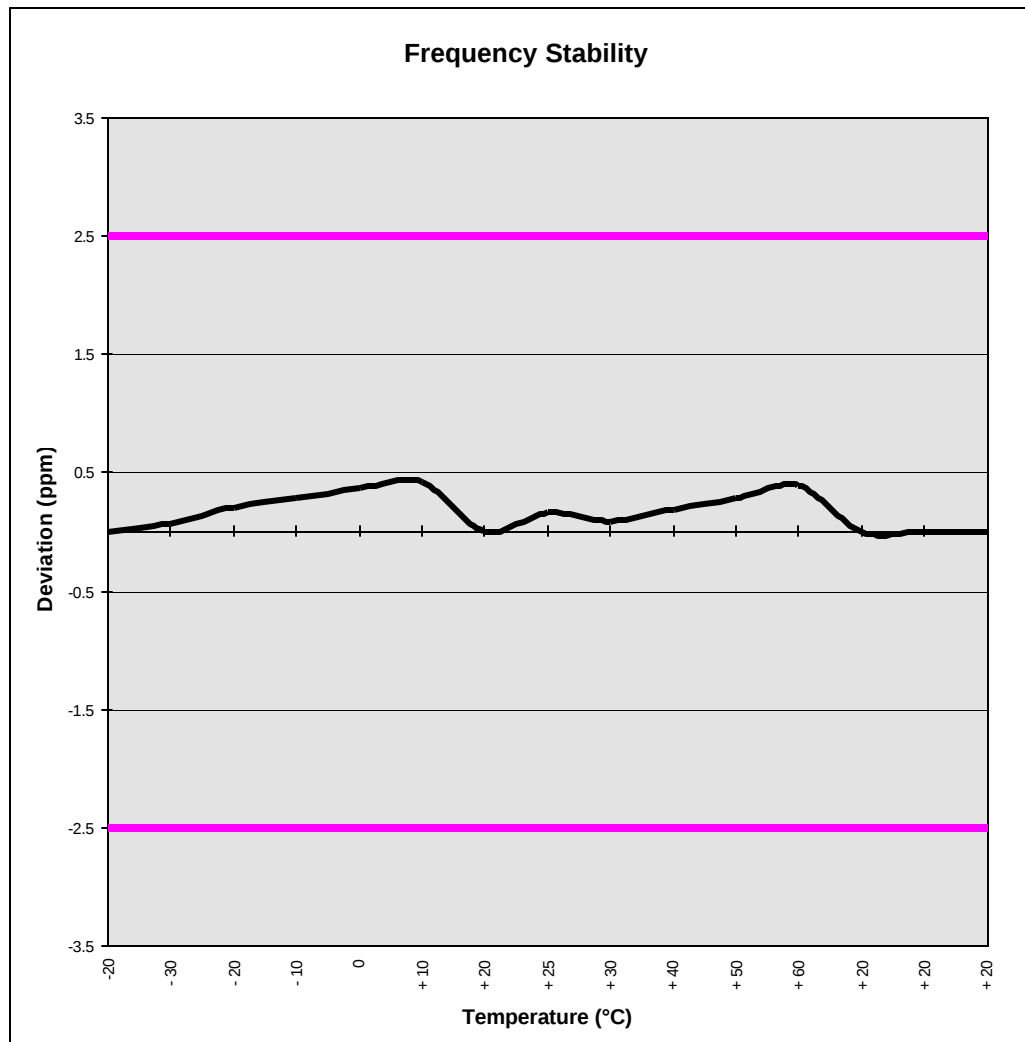
REFERENCE VOLTAGE: 3.7 VDC

DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

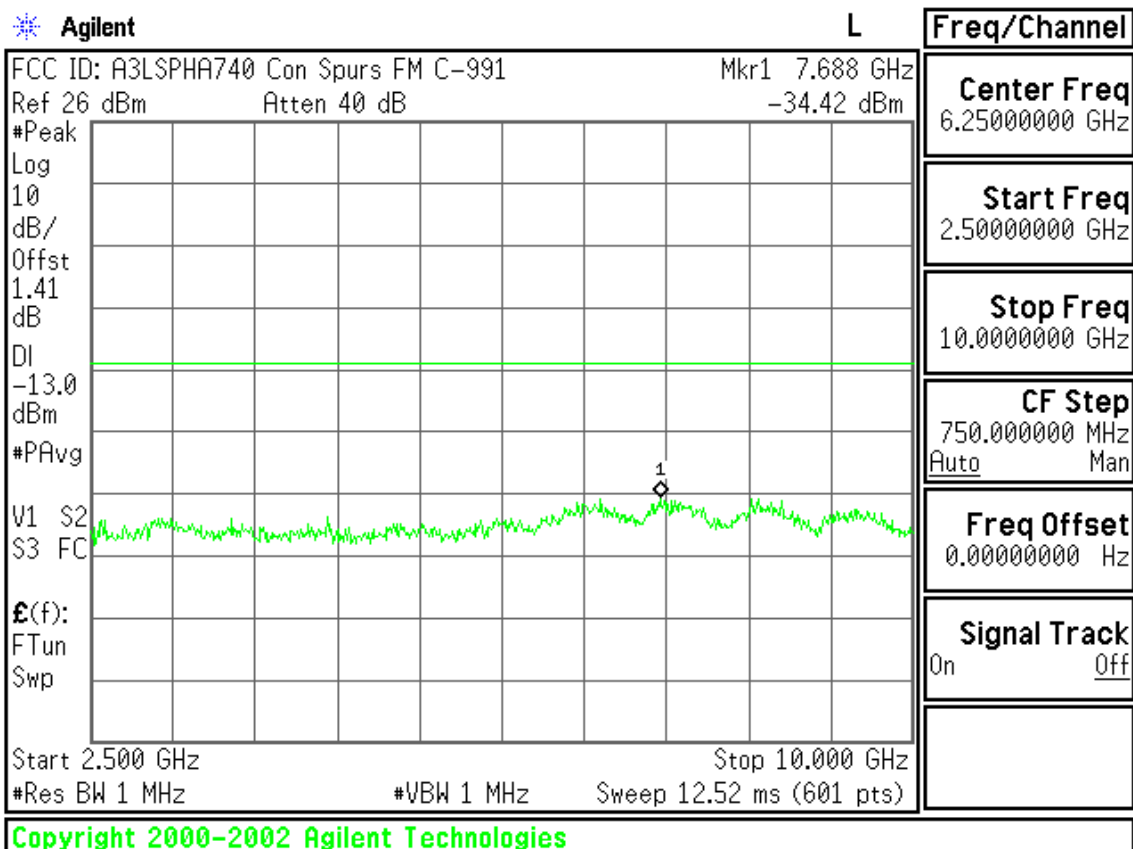
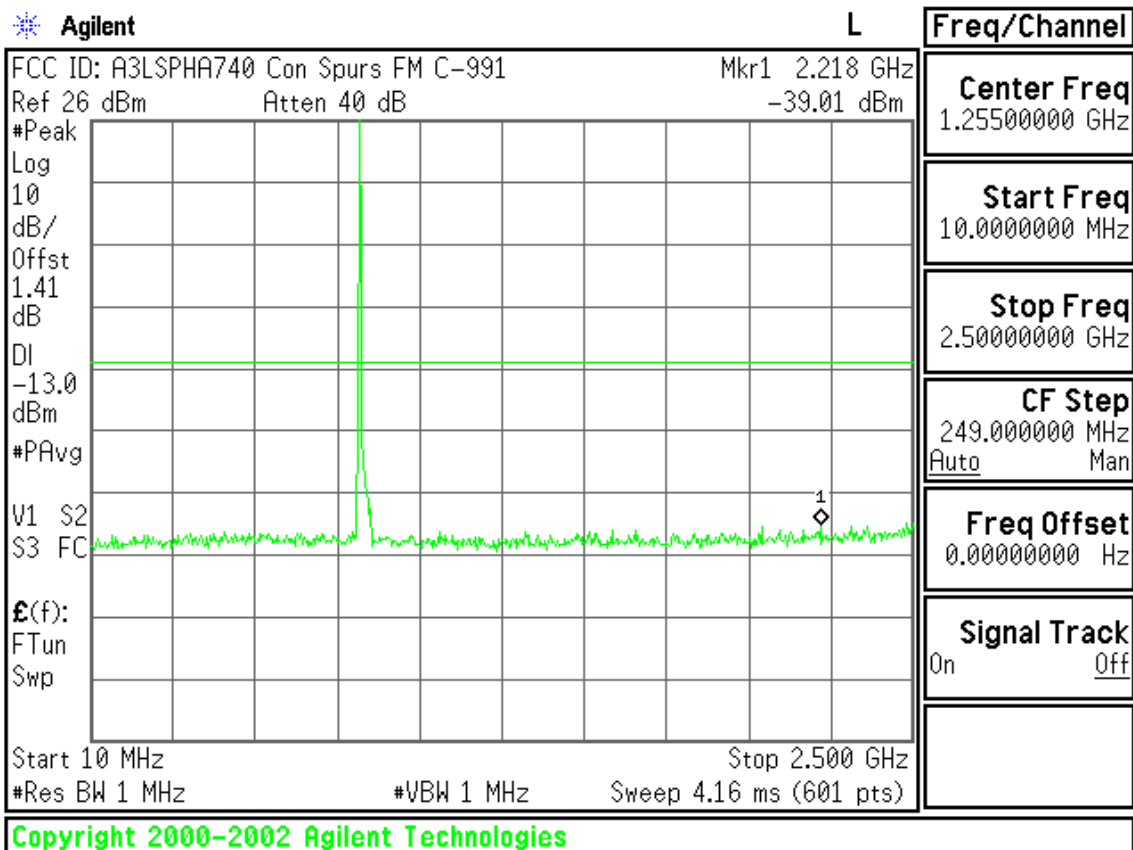
VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQ. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	836,490,004	0.000000
100 %		- 30	836,489,945	0.000007
100 %		- 20	836,489,828	0.000021
100 %		- 10	836,489,770	0.000028
100 %		0	836,489,694	0.000037
100 %		+ 10	836,489,653	0.000042
100 %		+ 20	836,490,004	0.000000
100 %		+ 25	836,489,870	0.000016
100 %		+ 30	836,489,929	0.000009
100 %		+ 40	836,489,845	0.000019
100 %		+ 50	836,489,770	0.000028
100 %		+ 60	836,489,678	0.000039
85 %	3.15	+ 20	836,490,004	0.000000
115 %	4.26	+ 20	836,490,004	0.000000
BATT. ENDPOINT	2.96	+ 20	836,490,004	0.000000

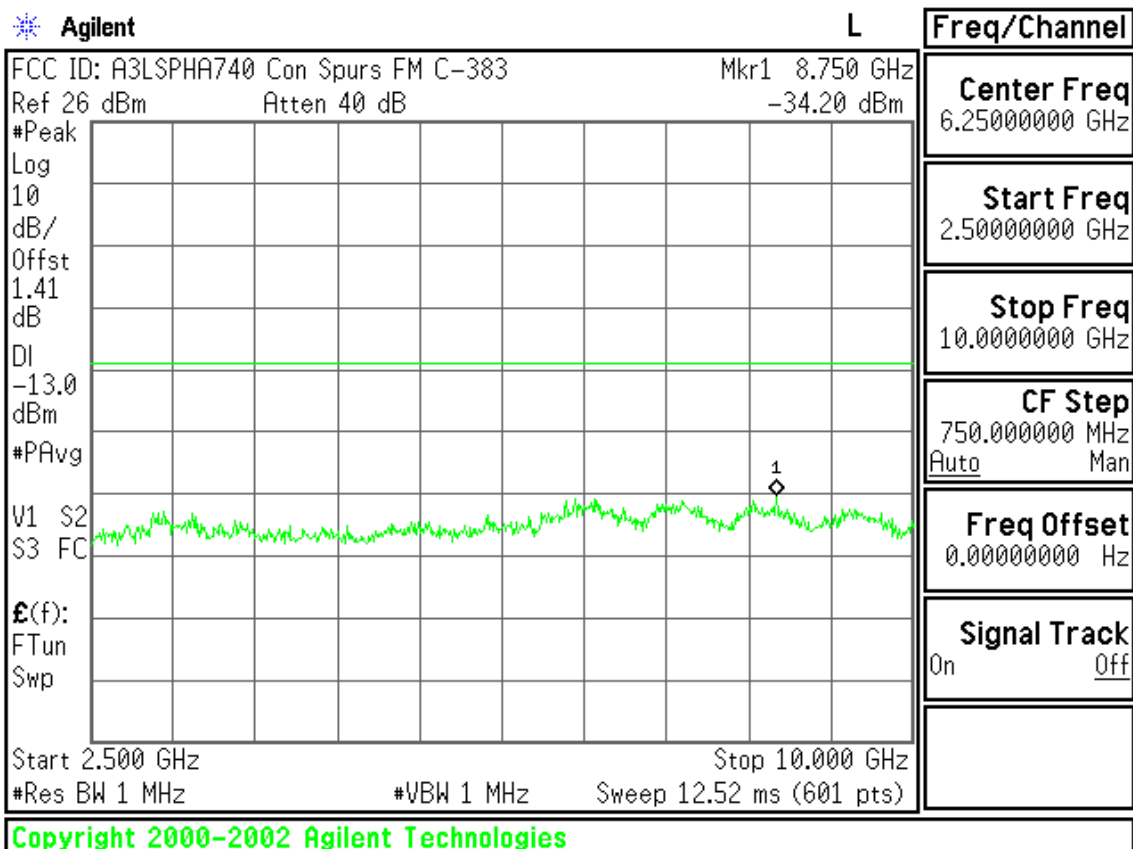
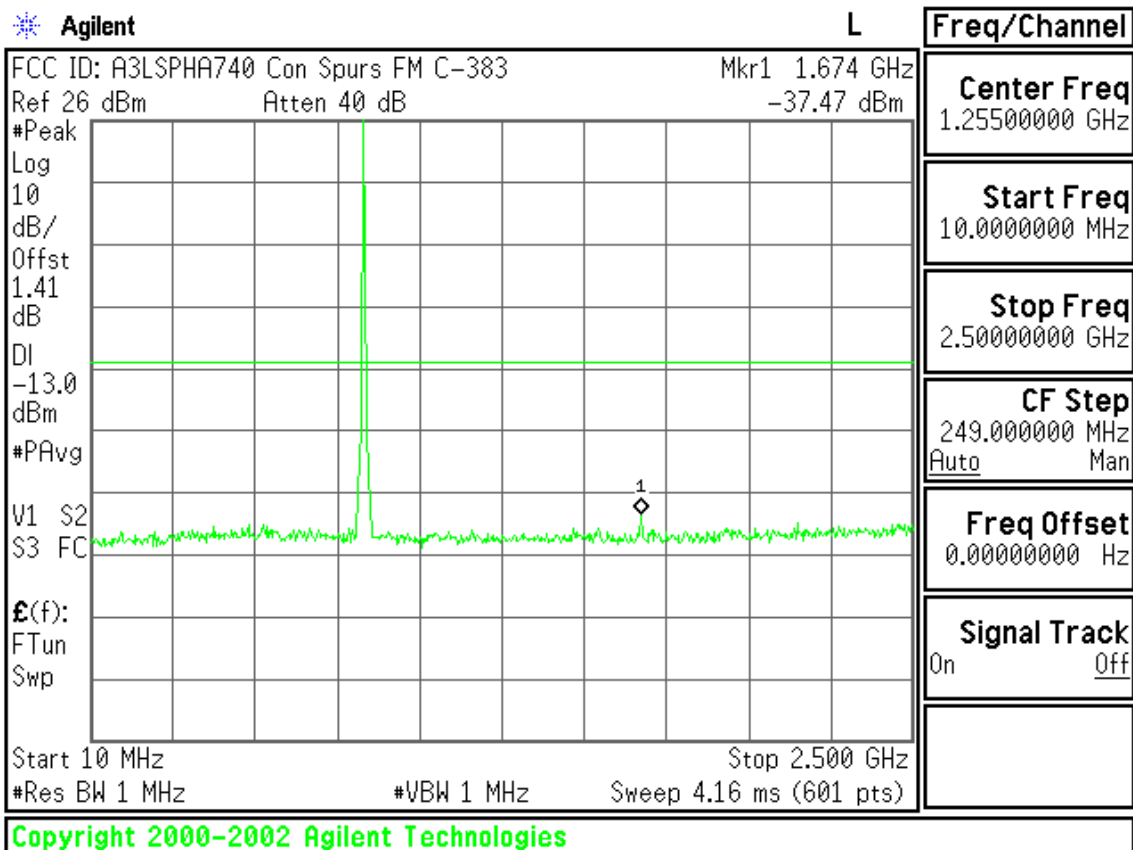
3.1 Test Data (Continued)

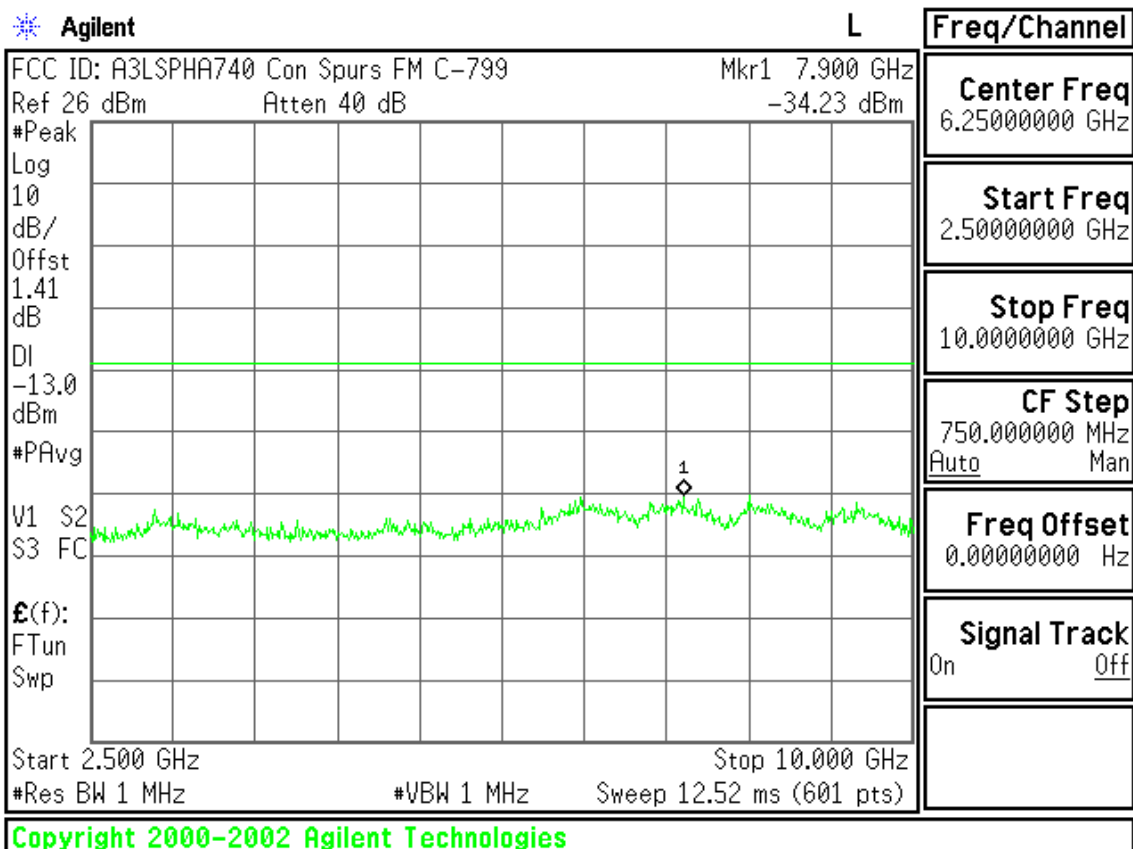
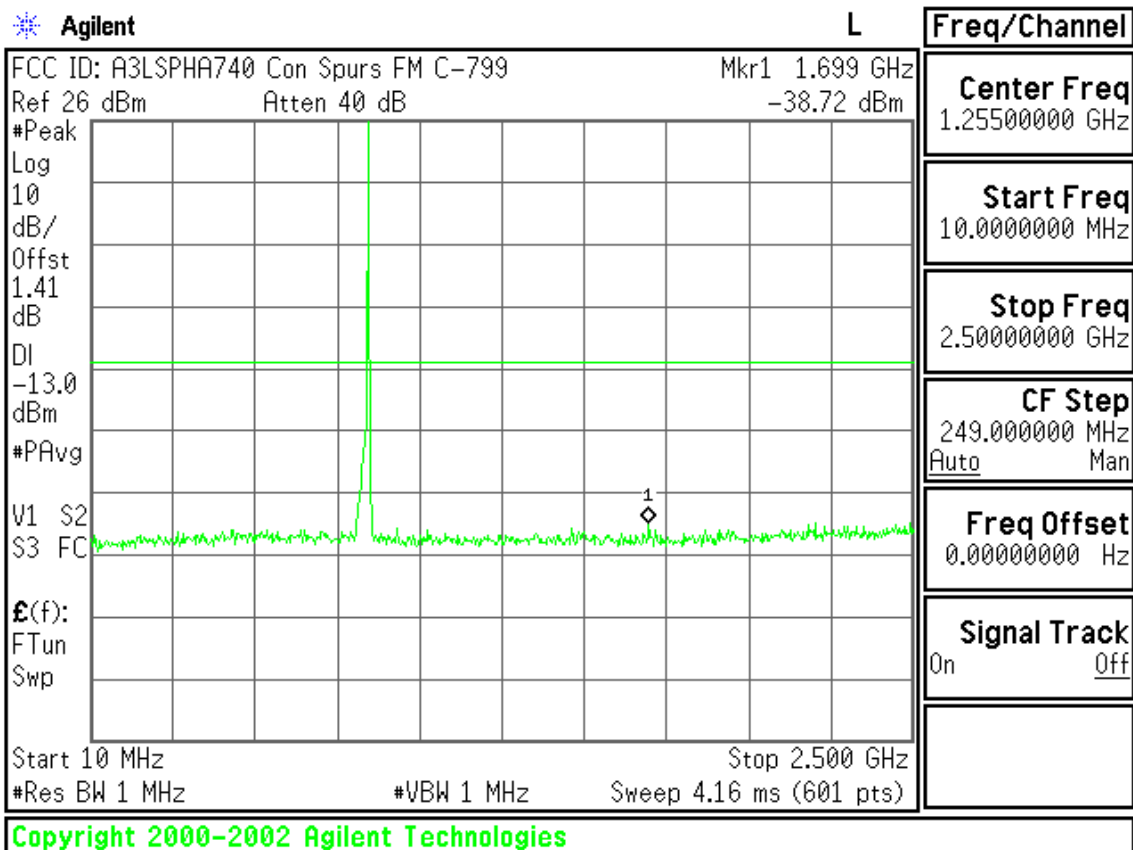
3.3 FREQUENCY STABILITY (AMPS)



PCTEST® PT. 22/24 SUPPLEMENT	 FCC MEASUREMENT SUPPLEMENT 			Reviewed By: Quality Manager
Test Report S/N: 22/24.240806483.A3L	Test Dates: August 6, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: A3LSPA740	Page 6 of 6







PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

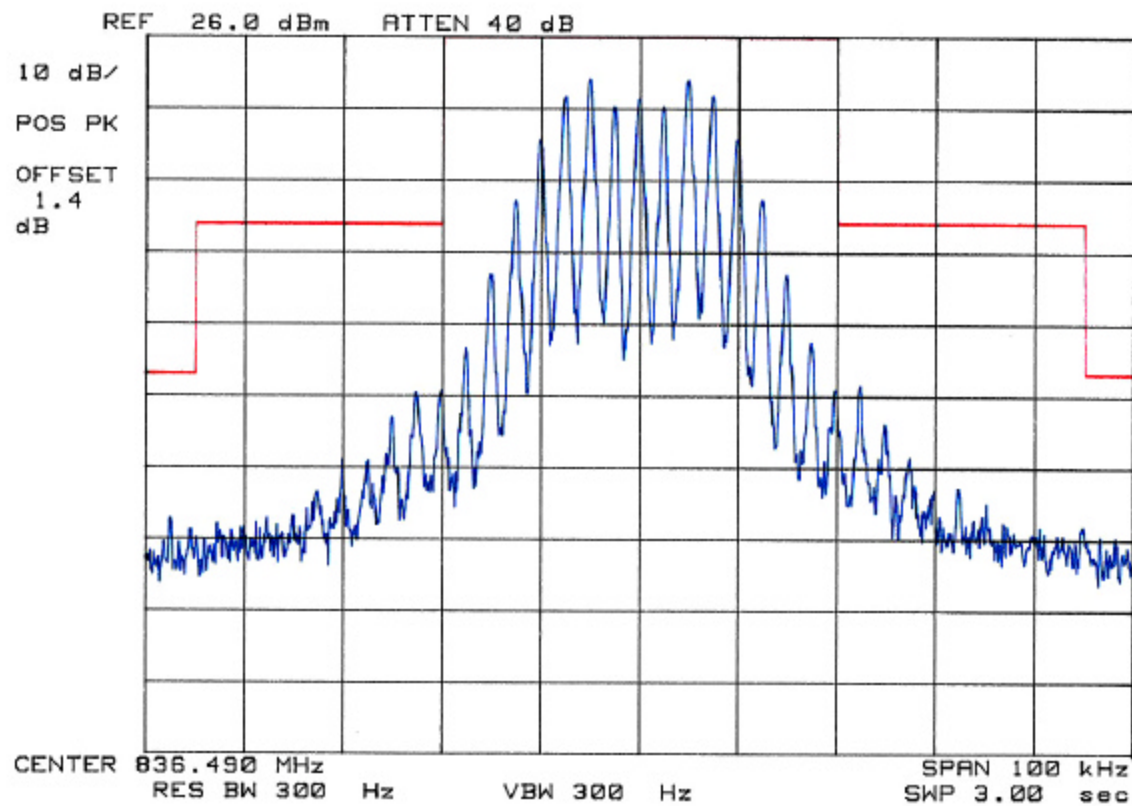
Tri-Mode Phone

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:Voice



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

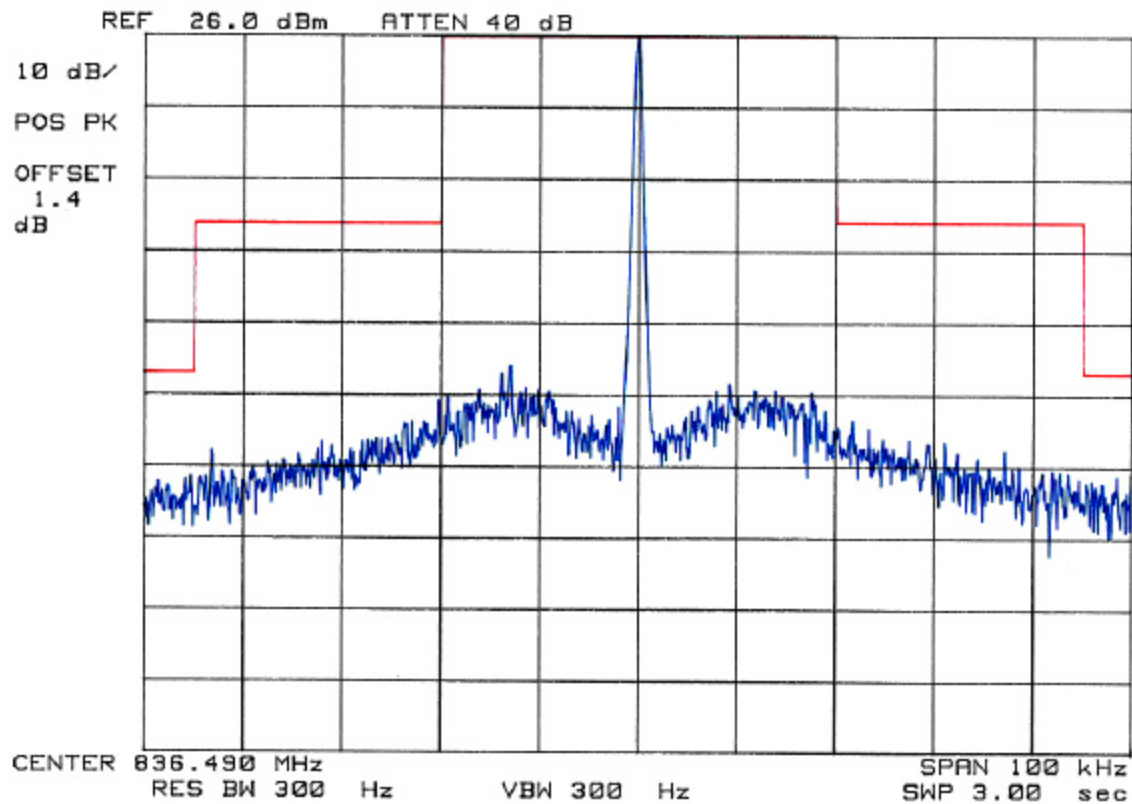
Tri-Mode Phone

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:Unmodulated Signal



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SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

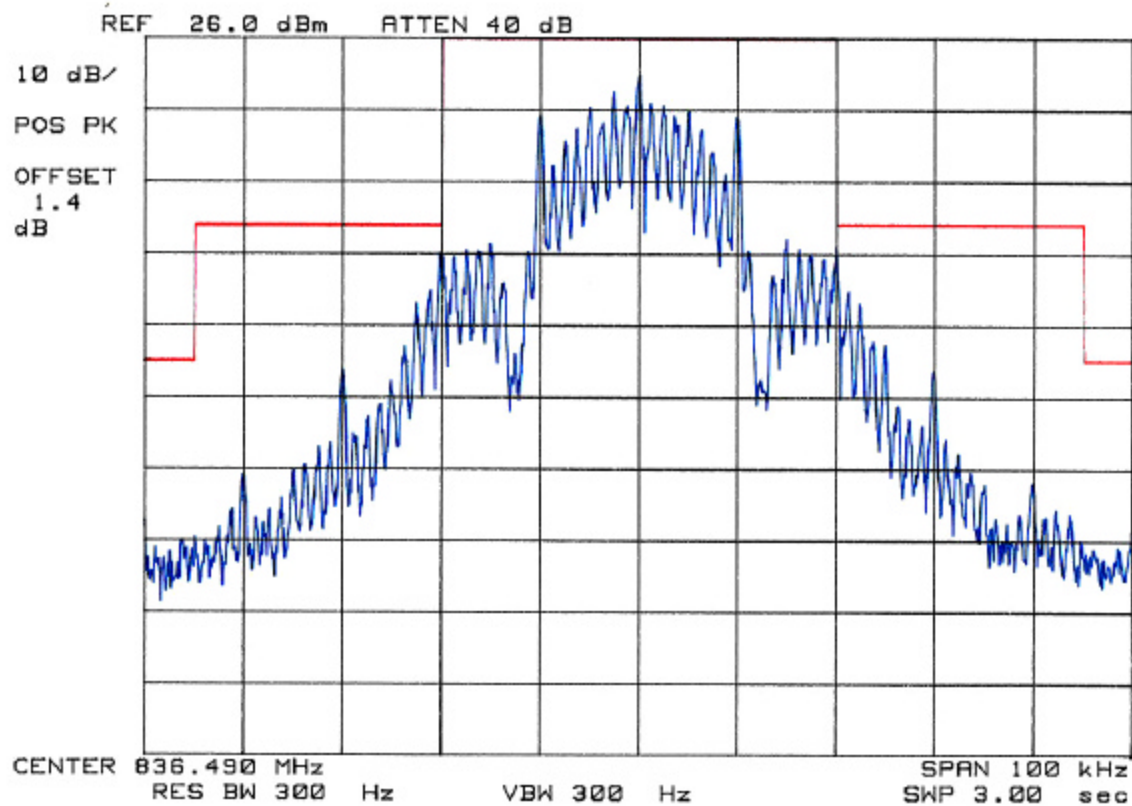
Tri-Mode Phone

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:Wide Band Data



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SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

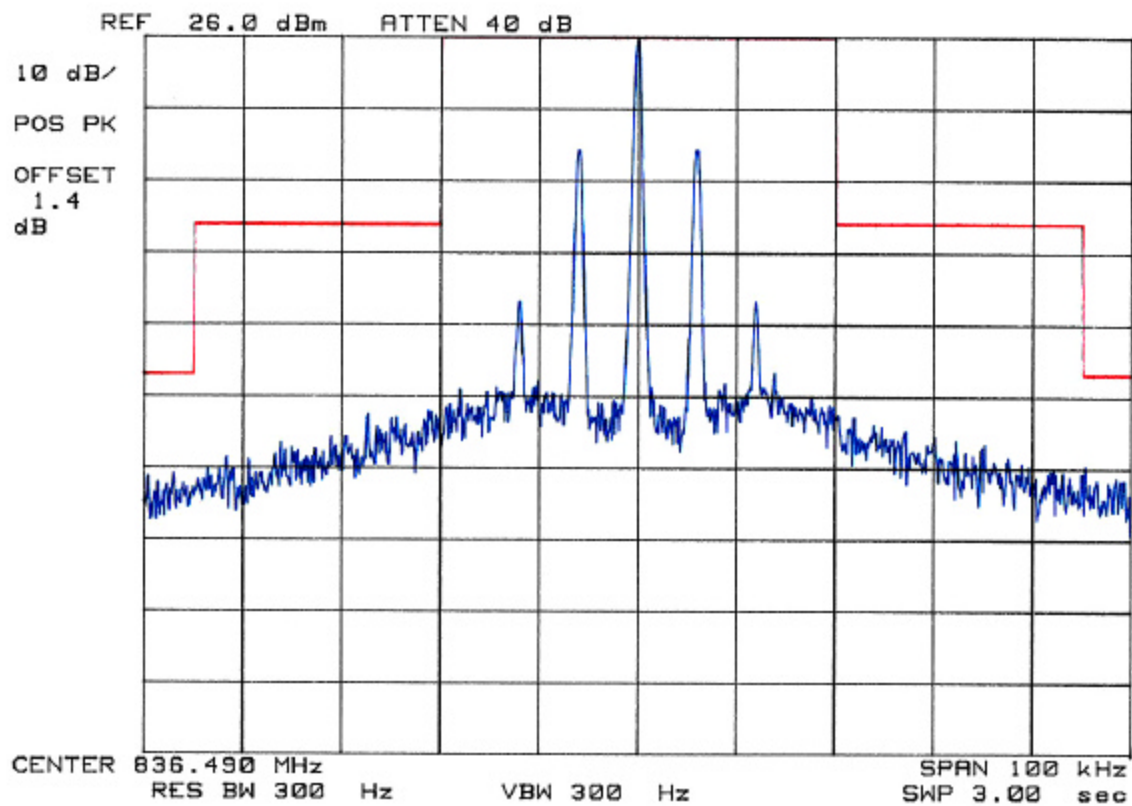
Tri-Mode Phone

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:SAT



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SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

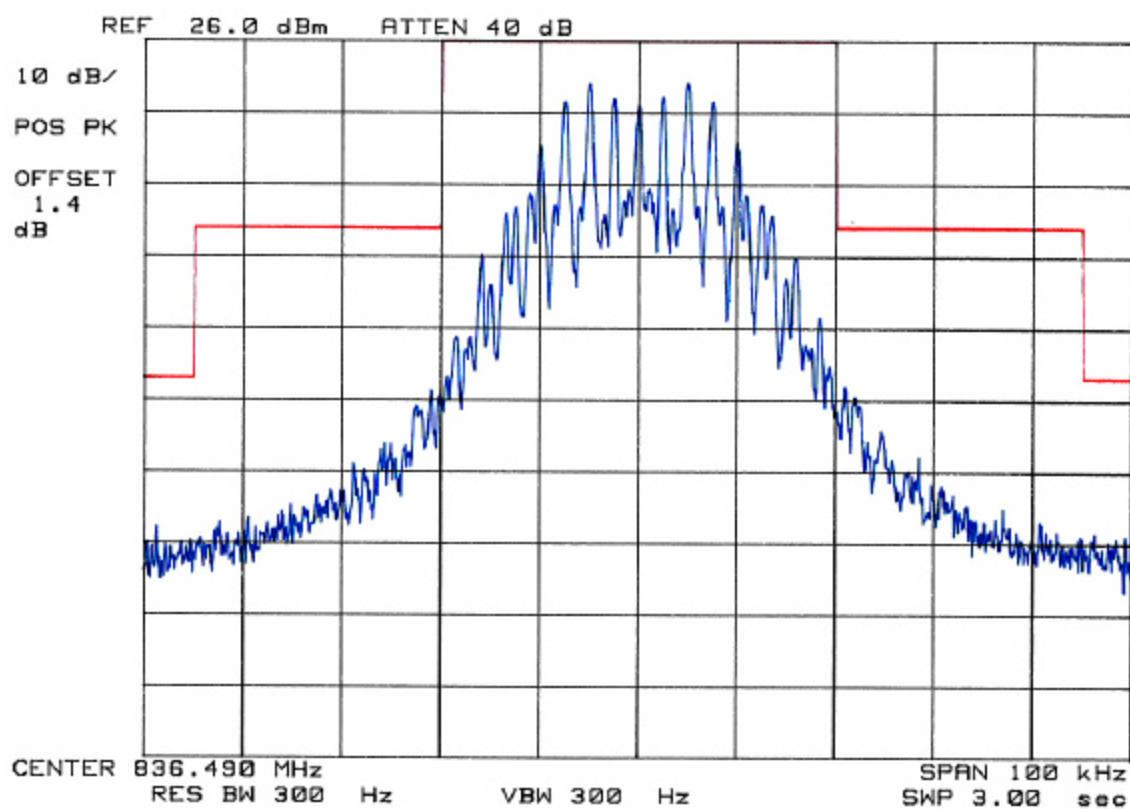
Tri-Mode Phone

FM Channel 383

Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:SAT + Voice



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SPECTRUM ANALYZER PRESENTATION

FCC ID:A3LSPHA740

SAMSUNG

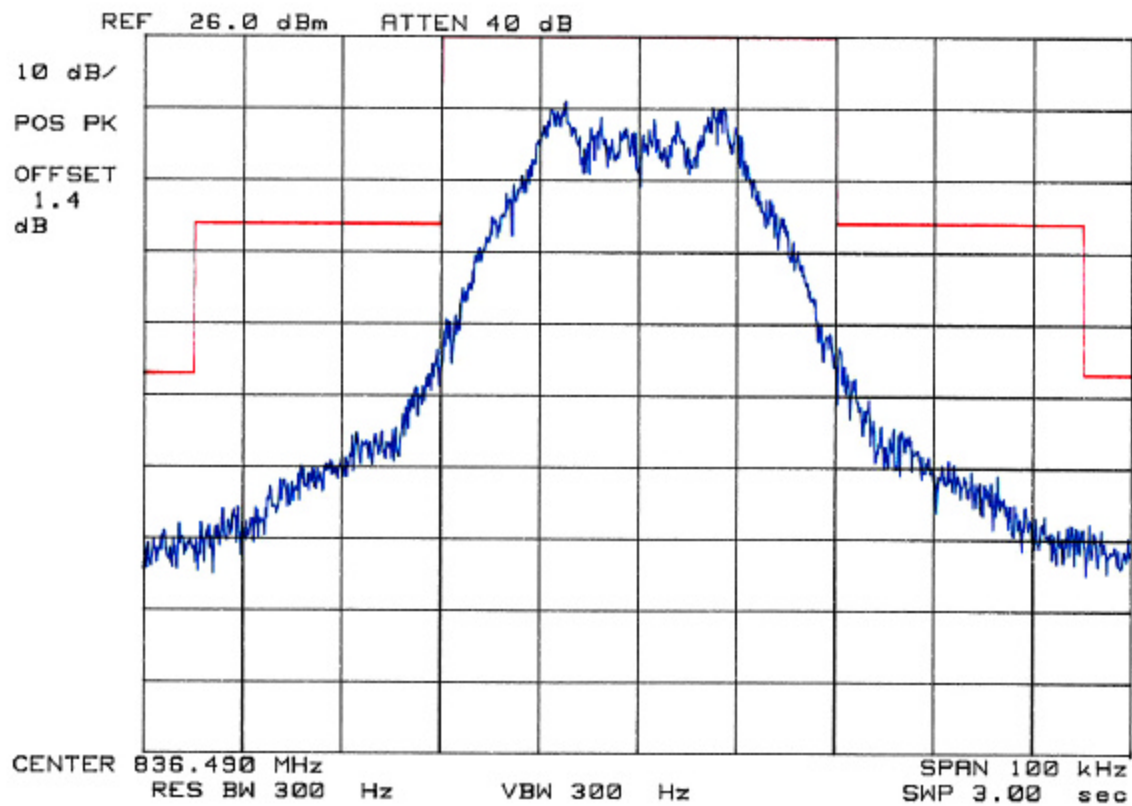
Tri-Mode Phone

FM Channel 383

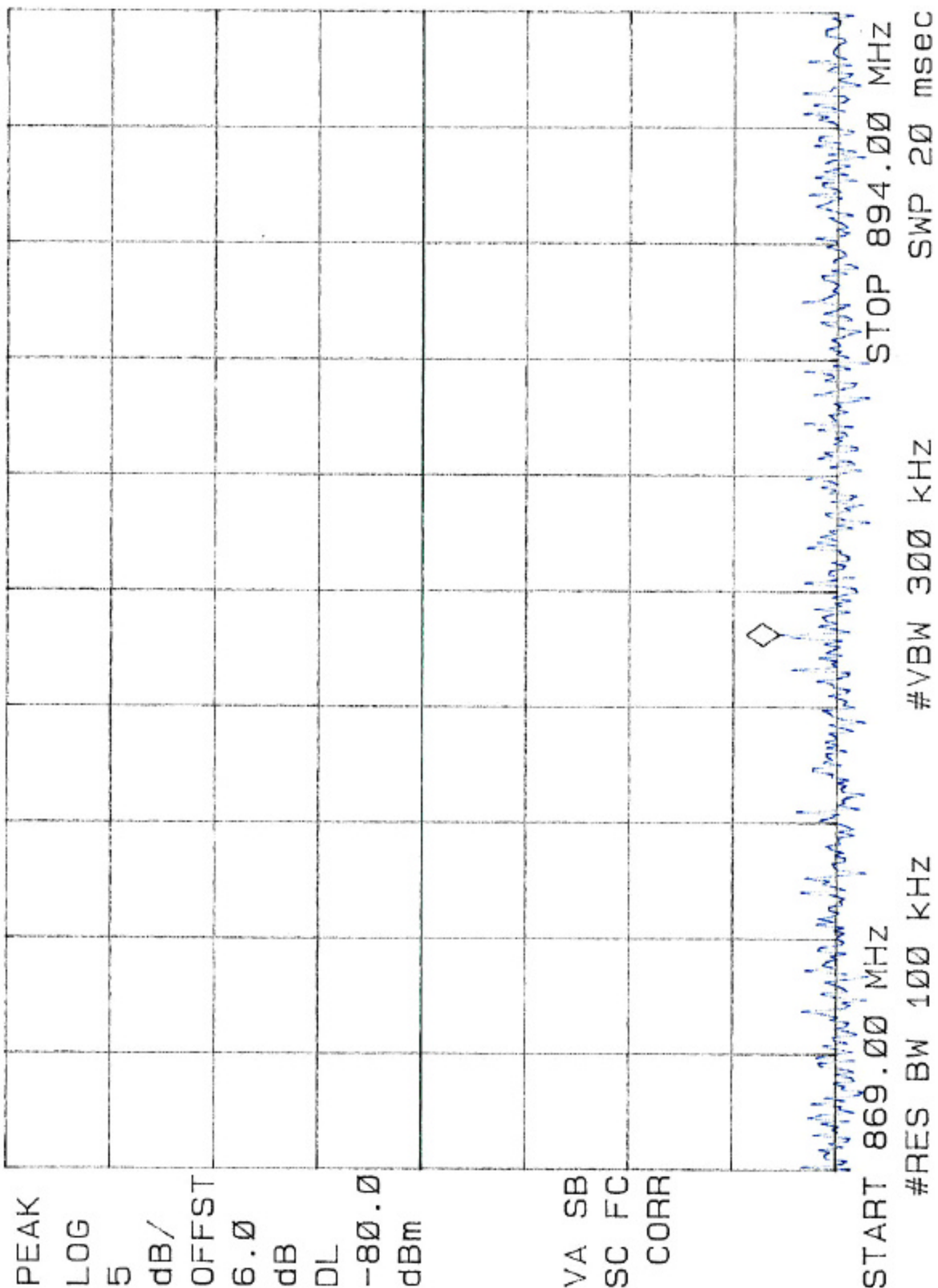
Operating Frequency: 836.490 MHz

Output Power : 26.0 dBm

Test Mode:SAT + DTMF



FCC ID: A3LSPHA740 MKR 880.56 MHz
REF -60.0 dBm AMPS MODE -97.21 dBm
ATTEN 10 dB PG 26.0 dB



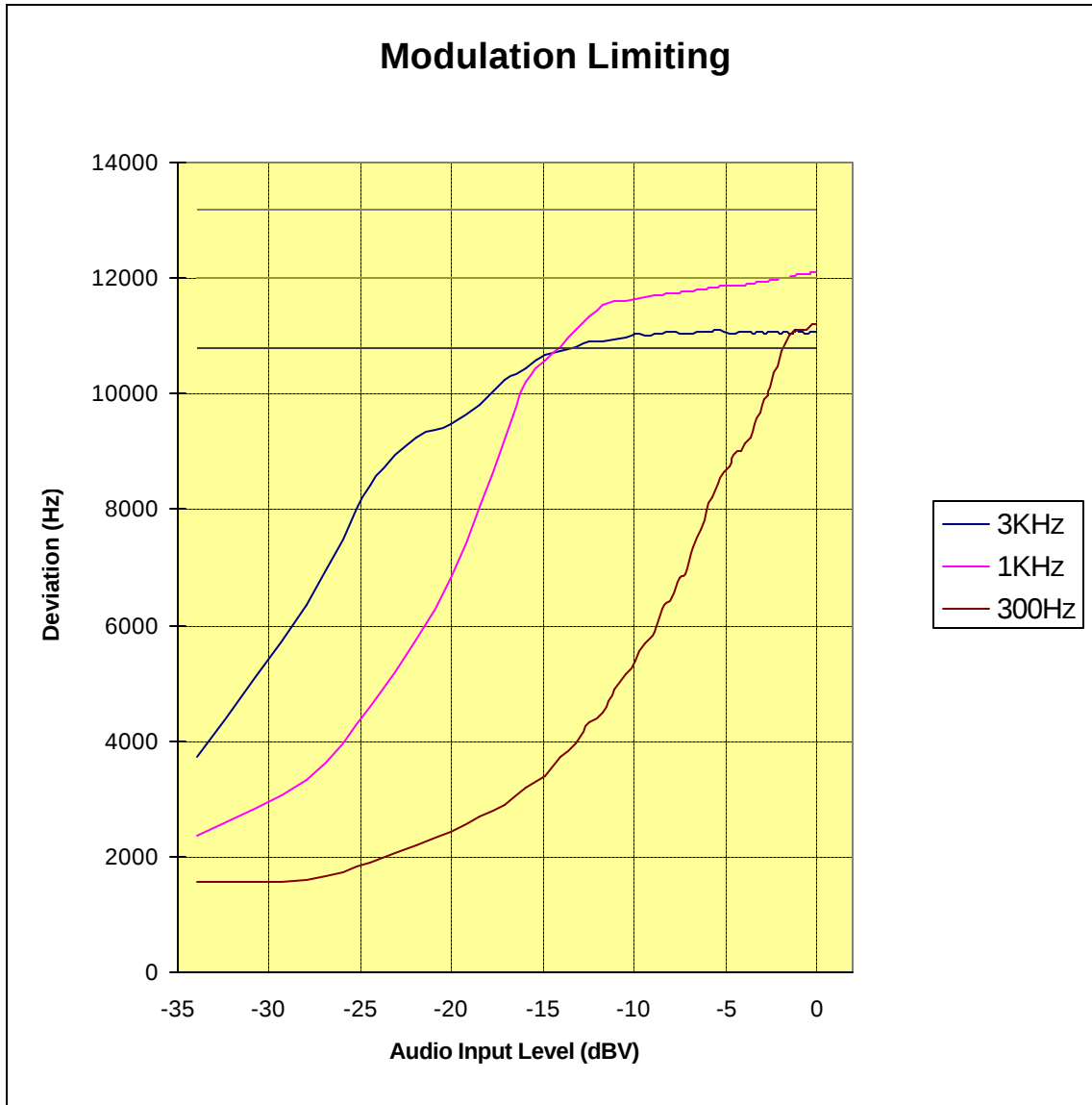
PCTEST Engineering Lab., Inc.

SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 22/24.240806483.A3L
Test Date: 08.06.2004

EUT: Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: SPH-A740
FCC ID: A3LSPHA740

REFERENCE: 1 kHz = 0 dB



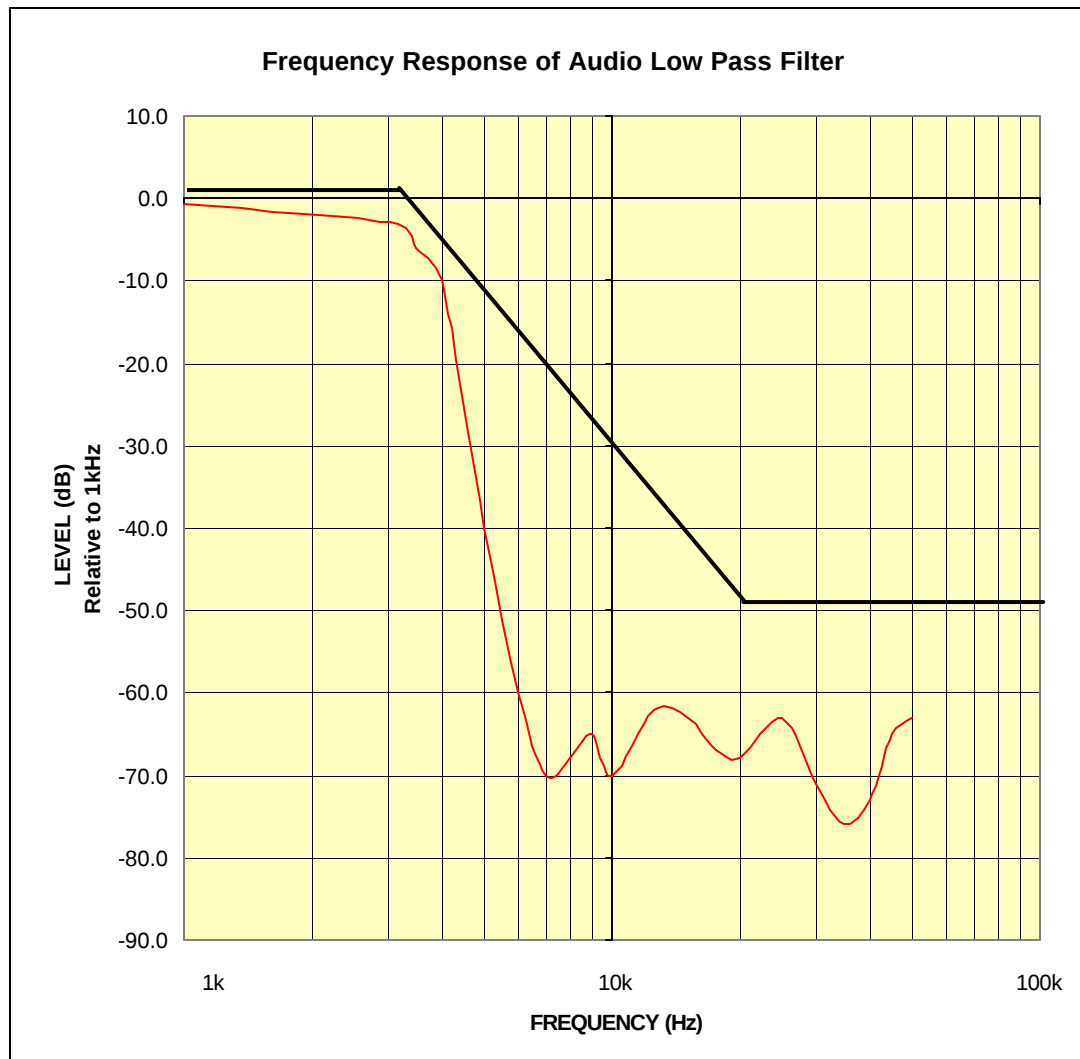
PCTEST Engineering Lab., Inc.

SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 22/24.240806483.A3L
Test Date: 08.06.2004

EUT: Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: SPH-A740
FCC ID: A3LSPHA740

REFERENCE: 1 kHz = 0 dB



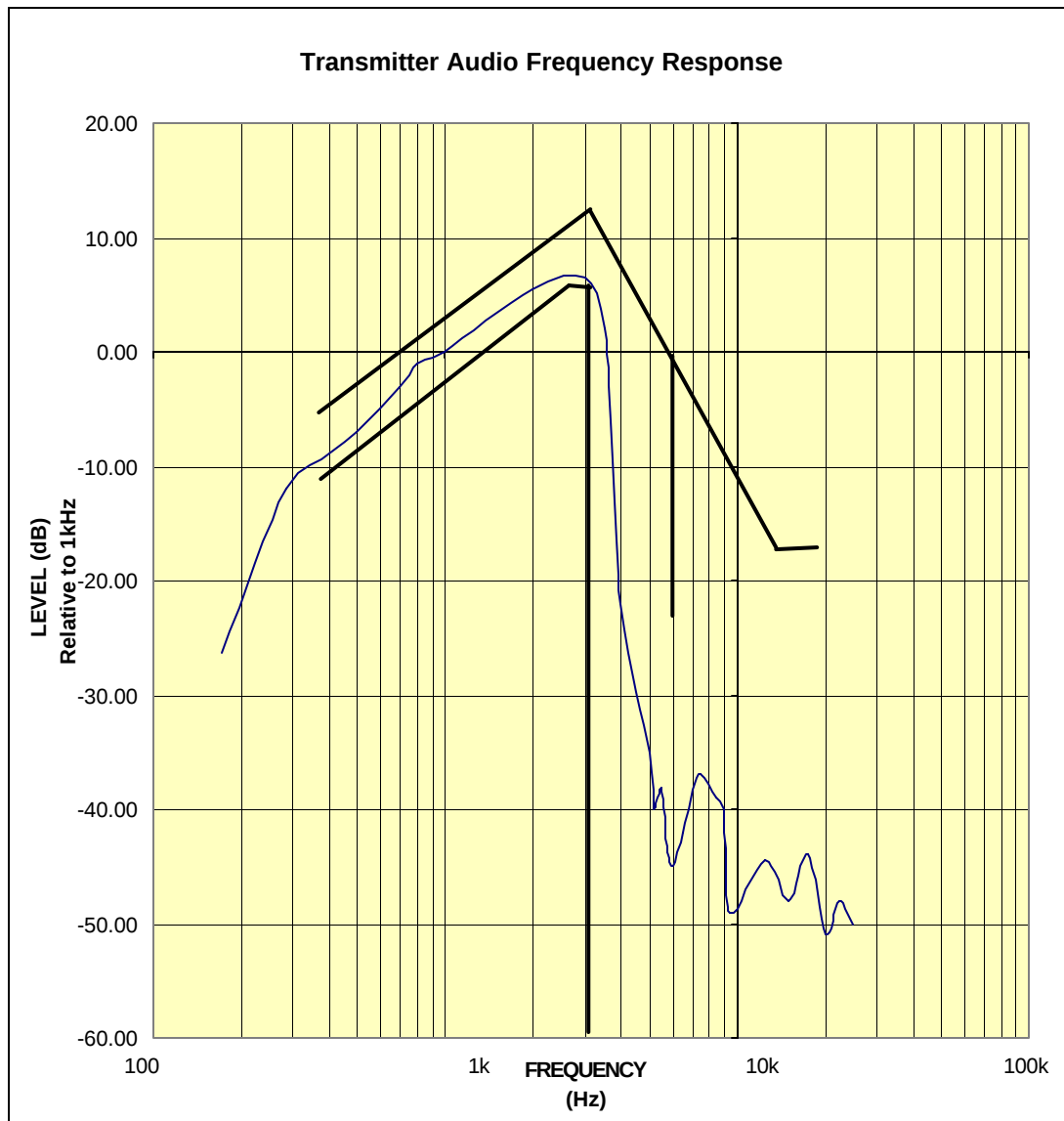
PCTEST Engineering Lab., Inc.

SUBJECT: Modulation Characteristics
FCC Part 24/22

Test Report No.: 22/24.240806483.A3L
Test Date: 08.06.2004

EUT: Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model: SPH-A740
FCC ID: A3LSPHA740

REFERENCE: 1 kHz = 0 dB



SAMSUNG Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
FCC ID: A3LSPHA740