

PCTEST Engineering Laboratory, Inc. 6660-B Dobbin Road • Columbia, MD 21045 • U.S.A. TEL (410) 290-6652 • FAX (410) 290-6654 http://www.pctestlab.com



CERTIFICATE OF COMPLIANCE FCC Part 24 & 22 Certification

LG ELECTRONICS, INC. 2000 Milbrook Drive Lincolnshire, IL 60069

Dates of Tests: September 13-15, 2004 Test Report S/N: 22/24.240913531.BEJ Test Site: PCTEST Lab, Columbia MD

FCC ID

BEJAX5000

APPLICANT

LG ELECTRONICS, INC.

Classification:	Licensed Portable Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§24(E), §22(H); §2
EUT Type:	Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
Model:	AX5000
Tx Frequency Range:	824.04MHz – 848.97MHz (AMPS) / 824.70 – 848.31MHz (CDMA)
	1851.25MHz – 1908.75MHz (PCS CDMA)
Rx Frequency Range:	869.04MHz – 893.97MHz (AMPS) / 869.70 – 893.31MHz (CDMA)
	1931.25MHz – 1988.75MHz (PCS CDMA)
Max. RF Output Power:	0.450 W ERP AMPS (26.529 dBm) / 0.287 W ERP CDMA (24.583 dBm)
	0.335 W EIRP PCS CDMA (25.251 dBm)
Max. SAR Measurement:	1.230 W/kg AMPS Head SAR; 0.848 W/kg AMPS Body SAR;
	0.674 W/kg CDMA Head SAR; 0.664 W/kg CDMA Body SAR;
	0.382 W/kg PCS CDMA Head SAR; 0.425 W/kg PCS CDMA Body SAR
Emission Designator(s):	40K0F8W / 40K0F1D (AMPS), 1M25F9W (CDMA)
Test Device Serial No.	Identical Prototype [S/N: #23B00D0B]

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Grant conditions: Power output listed is ERP for Part 22 and EIRP for Part 24. SAR compliance for bodyworn operating configuration is based on a separation distance of 1.5 cm between the back of the unit and the body of the user. End-users must be informed of the body-worn operating requirements for satisfying RF exposure compliance. Belt clips or holsters may not contain metallic components.

PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.



Alfred Cirwithian Vice President Engineering

PCTESTÔ PT. 22/24 REPORT	FCC MEASUREMENT REPORT			Reviewed By: Quality Manager
Test Report S/N:	Test Dates:	Phone Type :	FCC ID:	Page 1 of 32
22/24.240913531.BEJ	Sept. 13-15, 2004	Tri-Mode Dual-Band	BEJAX5000	



TABLE OF CONTENTS

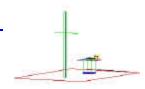
ATTACHMENT A:		
	ATTESTATION STATEMENT(S)	
ATTACHMENT C:	IEST REPORT	
1.1 SCOPE		3
2.1 INTRODUC	CTION	4
3.1 INSERTS		5
4.1 DESCRIPT		6-10
5.1 EFFECTIV	E RADIATED POWER OUTPUT	11-12
6.1 EQUIVALE	INT ISOTROPIC RADIATED POWER	13
7.1 RADIATED) MEASUREMENTS	14-22
8.1 FREQUEN	CY STABILITY	23-28
9.1 PLOTS OF	EMISSIONS	29
10.1 LIST OF	TEST EQUIPMENT	30
11.1 SAMPLE	CALCULATIONS	31
12.1 CONCLU	SION	32
ATTACHMENT D:	TEST PLOTS	
ATTACHMENT E:	FCC ID LABEL / LOCATION	
ATTACHMENT F:	TEST SETUP PHOTOGRAPHS	
ATTACHMENT G:	EXTERNAL PHOTOGRAPHS	
ATTACHMENT H:	INTERNAL PHOTOGRAPHS	
ATTACHMENT I:	BLOCK DIAGRAM(S)	
ATTACHMENT J:	SCHEMATIC DIAGRAM(S)	
ATTACHMENT K:	OPERATIONAL / CIRCUIT DESCRIPTION	
ATTACHMENT L:	PARTS LIST/TUNE UP PROCEDURE	
ATTACHMENT M:	USER'S MANUAL	
ATTACHMENT N:	SAR MEASUREMENT REPORT	
ATTACHMENT O:	SAR TEST DATA	
ATTACHMENT P:	SAR TEST SETUP PHOTOGRAPHS	
ATTACHMENT Q:	DIPOLE VALIDATION	
ATTACHMENT R:		

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 2 of 32
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MEASUREMENT REPORT

<u>1.1 Scope</u>



Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

§2.1033 General Information

	Applicant Name: Address:	LG ELECTRONICS, INC. 2000 Milbrook Drive Lincolnshire, IL 60069
•	FCC ID:	BEJAX5000
•	Quantity:	Quantity production is planned
•	Emission Designators:	40K0F8W / 40K0F1D (AMPS), 1M25F9W (CDMA)
•	Tx Freq. Range:	824.04 – 848.97 MHz (AMPS) 824.70 – 848.31 MHz (CDMA) 1851.25 – 1908.75 MHz (PCS CDMA)
•	Rx Freq. Range:	869.04 – 893.97 MHz (AMPS) 869.70 – 893.31 MHz (CDMA) 1931.25 – 1988.75 MHz (PCS CDMA)
•	Max. Power Rating:	0.450 W ERP AMPS (26.259 dBm) / 0.287 W ERP CDMA (24.583 dBm) 0.335 W EIRP PCS CDMA (25.251 dBm)
٠	FCC Classification(s):	Licensed Portable Tx Held to Ear (PCE)
٠	Equipment (EUT) Type:	Tri-Mode Dual-Band Analog/PCS Phone
٠	Modulation(s):	AMPS / CDMA
٠	Frequency Tolerance:	± 0.00025% (2.5 ppm)
٠	FCC Rule Part(s):	§ 24(E), §22(H)
٠	Dates of Tests:	September 13-15, 2004
•	Place of Tests:	PCTEST Lab, Columbia, MD U.S.A.
•	Test Report S/N:	22/24.240913531.BEJ
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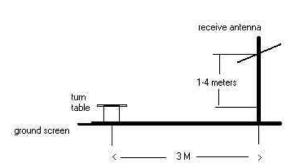
• Deviation from measurement procedure - None

PCTESTÔ PT. 22/24 REPORT	POTERT	FCC MEASUREMENT REP	Reviewed By: Quality Manager	
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 3 of 32
© 2004 PCTEST ENGINEERING LABORA	TORY, INC.	•	•	•





Figure 1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area.



Open Area Test Site

Figure 2. Diagram of 3-meter outdoor test range

These measurement tests were conducted at PCTEST Engineering Laboratory, Inc. facility in New Concept Business Park, Guilford
Industrial Park, Columbia, Maryland. The site address is 6660-B
Dobbin Road, Columbia, MD 21045. The test site is one of the
highest points in the Columbia area with an elevation of 390 feet
above mean sea level. The site coordinates are 39° 11'15" N
latitude and 76° 49'38" W longitude. The facility is 1.5 miles
North of the FCC laboratory, and the ambient signal and ambient
signal strength are approximately equal to those of the FCC
laboratory. There are no FM or TV transmitters within 15 miles
of the site. The detailed description of the measurement facility
was found to be in compliance with the requirements of § 2.948
according to ANSI C63.4 on October 19, 1992.

Measurement Procedure

The radiated and spurious measurements were made outdoors at a 3-meter test range (see Figure2). The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were 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 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 antenna are taken into consideration.

PCTESTÔ PT. 22/24 REPORT	POTENT	FCC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 4 of 32
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3.1 INSERTS

Function of Active Devices (Confidential)

The Function of active devices are shown in Attachment K.

Block & Schematic Diagrams (Confidential)

The block diagrams are shown in Attachment I, and the schematic diagrams are shown in Attachment J.

Operating Instructions

The instruction manual is shown in Attachment M.

Parts List & Tune-Up Procedure (Confidential)

The parts list & tune-up procedure is shown in Attachment L.

Description of Freq. Stabilization Circuit (Confidential)

The description of frequency stabilization circuit is shown in Attachment K.

Description for Suppression of Spurious Radiation, for Limiting Modulation, and Harmonic Suppresion Circuits (Confidential)

The description of suppression stabilization circuits is shown in Attachment K.

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 5 of 32
© 2004 POTEST ENGINEERING LABORA	TORY INC			



4.1 DESCRIPTION OF TESTS

4.2 Transmitter Audio Frequency Response

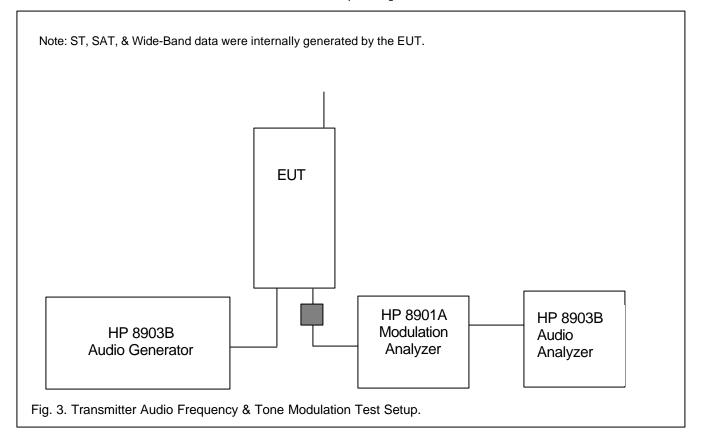
The frequency response of the audio modulating circuit over the frequency range 100 – 5000 Hz is measured. The audio signal generator is connected to the audio input circuit/microphone of the EUT. The audio signal input is adjusted to obtain 50% modulation at 1kHz and this point is taken as the 0dB reference. With the input held constant and below the limit at all frequencies, the audio signal generator is varied from 100 to 50 kHz.

4.3 Audio Low Pass Filter Frequency Response

The response in dB relative to 1kHz is measured using the HP8901 a Modulation Analyzer. For the frequency response of the audio low-pass filter, the audio input is connected at the input to the modulation limiter and the modulated stage. The audio output is connected at the output of the modulated stage. The corresponding plots are shown herein.

4.4 Modulation Limiting

The audio signal generator is connected to the audio input circuit/microphone of the EUT. The modulation response is measured for each of the three modulating frequencies (300Hz, 1000 Hz, and 3000Hz), and the input voltage is varied from 30% modulation (±3.6kHz deviation) to at least 20dB higher than the saturation point. Measurements of modulation and the plots are attached herein. Measurements were performed for ST, SAT, and wide-band data modulations. The corresponding results are shown herein.



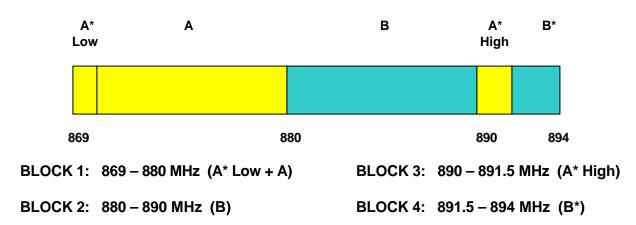
PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 6 of 32
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4.1 DESCRIPTION OF TESTS (CONTINUED)

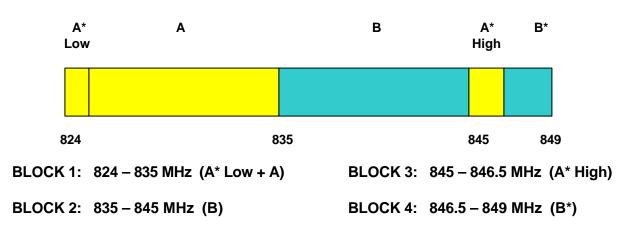
4.5 Occupied Bandwidth Emission Limits

- (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 1 MHz 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.



4.6 Cellular - Base Frequency Blocks

4.7 Cellular - Mobile Frequency Blocks

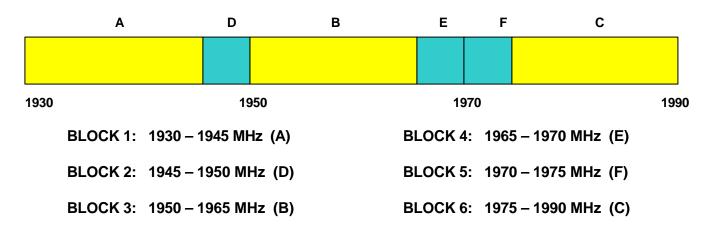


PCTESTÔ PT. 22/24 REPORT	-VPGTERT FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager	
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 7 of 32	
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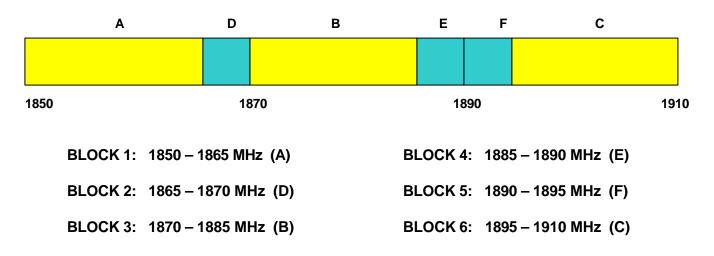


4.1 DESCRIPTION OF TESTS (CONTINUED)

4.8 PCS - Base Frequency Blocks



4.9 PCS - Mobile Frequency Blocks



PCTESTÔ PT. 22/24 REPORT	FCC MEASUREMENT REPORT			Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 8 of 32
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4.1 DESCRIPTION OF TESTS (CONTINUED)

4.10 Occupied Bandwidth

The audio signal generator is adjusted to 1kHz. The output level is set to ±6kHz deviation. With the level constant, the frequency is set to 2500Hz. Then the audio signal level is increased by 16dB. The occupied bandwidth data is obtained for the SAT (Supervisory Audio Tone), ST (Signaling Tone), WBD (Wideband data), and DTMF (Dual Tone Multi Frequencies). The results are shown on the attached graphs.

Specified Limits:

- a. On any frequency removed from the assigned carrier frequency by more than 20 kHz, up to and including 45kHz, the sideband is at least 26dB below the carrier.
- b. On any frequency removed from the assigned carrier frequency by more than 45 kHz, up to and including 90kHz, the sideband is at least 45dB below the carrier.
- c. On any frequency removed from the assigned carrier frequency by more than 90 kHz, up to the first multiple of the carrier frequency, the sideband is at least 60dB below the carrier or 40 + log₁₀ (mean power output in Watts) dB, whichever is the smaller attenuation.

4.11 Spurious and Harmonic Emissions at Antenna Terminal

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to at least the 10th harmonic. The transmitter is modulated with a 2500Hz tone at a level of 16dB greater than that required to provided 50% modulation.

At the input terminals of the spectrum analyzer, an isolator (RF circulator with on port terminated with 50 ohms) and an 870 MHz to 890 MHz bandpass filter is connected between the test transceiver (for conducted tests) or the receive antenna (for radiated tests) and the analyzer. The rejection of the bandpass filter to signals in the 825 – 845 MHz range is adequate to limit the transmit energy from the test transceiver which appears to a level which will allow the analyzer to measure signals less than –90dBm. Calibration of the test receiver is performed in the 870 – 890 MHz range to insure accuracy to allow variation in the bandpass filter insertion loss to be calibrated.

4.12 Frequencies

At the input terminals of the spectrum analyzer, an isolator (RF pad) and an high-pass filter are connected between the test transceiver (for conducted tests) or the receive antenna (for radiated tests) and the analyzer. The high-pass filter (signals below 1.6 GHz) is to limit the fundamental frequency from interfering with the measurement of low-level spurious and harmonic emissions and to ensure that the preamplifier is not saturated.

4.13 Radiation Spurious and Harmonic Emissions

Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were 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 with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This 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.

PCTESTÔ PT. 22/24 REPORT	POTERT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 9 of 32
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The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied 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 ± 0.00025 (± 2.5 ppm) of the center frequency.

Time Period and Procedure:

- 1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature (22°C to 25°C to provide a reference).
- 2. The equipment is subjected to an overnight "soak" at -30°C without any power applied.
- 3. 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 power to the transmitter.
- 4. 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.
- 5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
- 6. 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.
- 7. The artificial load is mounted external to the temperature chamber.

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

PCTESTÔ PT. 22/24 REPORT	Perent	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 10 of 32
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5.2 Effective Radiated Power Output

A. POWER: Low (Analog Mode)

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)
824.04	-34.900	Н	0.004	6.373
836.49	-34.900	Н	0.005	6.529
848.97	-35.300	Н	0.004	6.285

B. POWER: High (Analog Mode)

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.04	-14.900	Н	0.434	26.373	Standard
836.49	-14.900	Н	0.450	26.529	Standard
848.97	-15.300	Н	0.425	26.285	Standard

Note: Standard batteries the only 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.

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 11 of 32
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5.3 Effective Radiated Power Output

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.70	-16.850	Н	0.277	24.423	Standard
836.49	-16.850	Н	0.287	24.583	Standard
848.31	-17.300	Н	0.268	24.283	Standard

A. POWER: High (CDMA Mode)

Note: Standard batteries the only 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.

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 12 of 32
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6.2 Equivalent Isotropic Radiated Power (E.I.R.P.)

Radiated measurements at 3 meters

Supply Voltage: <u>3.7</u> VDC

Modulation: PCS CDMA

FREQ. (MHz)	REF. LEVEL (dBm)	POL (H/V)	Azimuth (o angle)	EIRP (dBm)	EIRP (W)	Battery
1851.25	-18.200	Н	90	24.881	0.308	Standard
1880.00	-18.000	Н	90	25.251	0.335	Standard
1908.75	-18.500	Н	90	24.921	0.311	Standard

Note: Standard and extended batteries are options for this phone

NOTES:

Equivalent Isotropic Radiated Power 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 Horn antenna was substituted in place of the EUT. This Horn 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 Horn antenna is measured. The difference between the gain of the horn and an isotropic antenna is taken into consideration and the FIRP is recorded.

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🕕 LG	Reviewed By: Quality Manager
Test Report S/N:	Test Dates:	Phone Type :	FCC ID:	Page 13 of 32
22/24.240913531.BEJ	Sept. 13-15, 2004	Tri-Mode Dual-Band	BEJAX5000	



7.2 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

824	_MHz	
0991 ((Low)	_
26.529	dBm =	<u>0.450</u> W
FM (Internal)		
3	meters	
43 + 10 log ₁₀ (W) =	39.53	_ dBc
	0991	FM (Internal) <u>3</u> meters

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dRd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
	(ubiii)	(dBd)	(ubiii)		
1648.08	-57.18	6.10	-51.08	Н	77.6
2472.12	-57.68	6.70	-50.98	Н	77.5
3296.16	-70.88	6.80	-64.08	Н	90.6
4120.20	-72.78	6.50	-66.28	Н	92.8

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

PCTESTÔ PT. 22/24 REPORT	PGTERT	FCC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N:	Test Dates:	Phone Type:	FCC ID:	Page 14 of 32
22/24.240913531.BEJ	Sept. 13-15, 2004	Tri-Mode Dual-Band	BEJAX5000	



7.3 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

836	5.49	MHz
0383	(Mid)	_
26.529	dBm =	<u>0.450</u> W
FM (Internal)		
3	meters	
43 + 10 log ₁₀ (W) =	39.53	dBc
	0383 26.529 FM (Internal) 3	0383 (Mid) <u>26.529</u> dBm = FM (Internal) <u>3</u> meters

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBd)	LEVEL (dBm)	(H/V)	(dBc)
1672.98	-54.48	6.10	-48.38	Н	74.9
2509.47	-57.38	6.70	-50.68	Н	77.2
3345.96	-69.78	6.80	-62.98	н	89.5
4182.45	-70.68	6.50	-64.18	Н	90.7

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager			
Test Report S/N: Test Dates: Phone Type : FCC ID: Page 15 of 32 22/24.240913531.BEJ Sept. 13-15, 2004 Tri-Mode Dual-Band BEJAX5000 Page 15 of 32							
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7.4 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

848	.97	_MHz
0799 (High)	_
26.529	dBm =	<u>0.450</u> W
FM (Internal)		
3	meters	
43 + 10 log ₁₀ (W) =	39.53	dBc
	0799 (FM (Internal) 3 meters

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
	(ubiii)	(ubu)	(uDiii)		
1697.94	-57.08	6.10	-50.98	V	77.5
2546.91	-57.88	6.70	-51.18	V	77.7
3395.88	-70.48	6.80	-63.68	V	90.2
4244.85	-71.78	6.50	-65.28	V	91.8

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

Test Report S/N: Test Dates: Phone Type: FCC ID: Page 16 of 32 22/24 240913531 BEI Sept 13-15 2004 Tri-Mode Dual-Band BEIAX5000 Page 16 of 32	PCTESTÔ PT. 22/24 REPORT	POTERT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
	Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 16 of 32



7.5 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	824	.70	_MHz
CHANNEL:	1013	(Low)	_
MEASURED OUTPUT POWER:	24.583	dBm =	<u>0.288</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	37.59	_ dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS	SUBSTITUTE ANTENNA GAIN	CORRECT GENERATOR LEVEL	POL (H/V)	(dBc)
((dBm)	(dBd)	(dBm)	(, .)	(420)
1649.40	-60.38	6.10	-54.28	V	78.9
2474.10	-68.18	6.70	-61.48	V	86.1
3298.80	-71.78	6.80	-64.98	V	89.6
4123.50	-78.38	6.50	-71.88	V	96.5

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

Test Report S/N: Test Dates: Phone Type: FCC ID: Page 17 of 32 22/24.240913531.BEI Sept. 13-15.2004 Tri-Mode Dual-Band BEIAX5000 Page 17 of 32	PCTESTÔ PT. 22/24 REPORT	POTERT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
		Test Dates: Sept. 13-15, 2004		FCC ID: BEJAX5000	Page 17 of 32



7.6 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

835	.89	_MHz
0363	(Mid)	_
24.583	dBm =	<u>0.287</u> W
CDMA (Internal)		
3	meters	
$43 + 10 \log_{10} (W) =$	37.58	_ dBc
	0363 24.583 CDMA (Internal) 3	CDMA (Internal) 3 meters

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBd)	LEVEL (dBm)	(H/V)	(dBc)
1671.78	-56.88	6.10	-50.78	V	75.4
2507.67	-65.58	6.70	-58.88	V	83.5
3343.56	-71.78	6.80	-64.98	V	89.6
4179.45	-76.98	6.50	-70.48	V	95.1
5015.34	-76.78	7.00	-69.78	V	94.4

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

Test Report S/N: Test Dates: Phone Type: FCC ID: Page 18 of 32 22/24.240913531.BEJ Sept. 13-15, 2004 Tri-Mode Dual-Band BEJAX5000 Page 18 of 32	PCTESTÔ PT. 22/24 REPORT	-VPGTERT FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
					Page 18 of 32



7.7 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	848	.31	MHz
CHANNEL:	0777 (High)	_
MEASURED OUTPUT POWER:	24.583	dBm =	<u>0.287</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.58	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBd)	LEVEL (dBm)	(H/V)	(dBc)
1696.62	-56.68	6.10	-50.58	V	75.2
2544.93	-65.38	6.70	-58.68	V	83.3
3393.24	-73.08	6.80	-66.28	V	90.9
4241.55	-75.68	6.50	-69.18	V	93.8

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

Test Report S/N: Test Dates: Phone Type: FCC ID: Page 19 of 32 22/24.240913531.BEJ Sept. 13-15, 2004 Tri-Mode Dual-Band BEJAX5000 Page 19 of 32	PCTESTÔ PT. 22/24 REPORT	FC	C MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
					Page 19 of 32



7.8 PCS CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1851	.25	MHz
CHANNEL:	0025 ((Low)	_
MEASURED OUTPUT POWER:	25.251	dBm =	<u>0.335</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	38.25	dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3702.50	-45.53	8.70	-36.83	V	62.1
5553.75	-52.43	9.70	-42.73	V	68.0
7405.00	-52.63	9.90	-42.73	V	68.0
9256.25	-71.13	11.40	-59.73	V	85.0

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

Test Report S/N: Test Dates: Phone Type: FCC ID: Page 20 of 32 22/24.240913531 BEJ Sept. 13-15.2004 Tri-Mode Dual-Band BEIAX5000 Page 20 of 32	PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
		Test Dates: Sept. 13-15, 2004		FCC ID: BEJAX5000	Page 20 of 32



PCTESTÔ PT. 22/24 REPORT	POTENT FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 21 of 32
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7.9 PCS CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1880	0.00	MHz
CHANNEL:	0600 (Mid)		_
MEASURED OUTPUT POWER:	25.251	dBm =	<u>0.335</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	38.25	dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3760.00	-44.23	8.70	-35.53	V	60.8
3760.00	-44.23	0.70	-30.03	V	00.0
5640.00	-50.53	9.70	-40.83	V	66.1
7520.00	-59.83	9.90	-49.93	V	75.2
9400.00	-60.63	11.40	-49.23	V	74.5
11280.00	-73.13	12.10	-61.03	V	86.3

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

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PCTESTÔ PT. 22/24 REPORT	V Harrison and		ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N:	Test Dates:	Phone Type :	FCC ID:	Page 22 of 32
22/24.240913531.BEJ	Sept. 13-15, 2004	Tri-Mode Dual-Band	BEJAX5000	



7.10 PCS CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1908	.75	MHz
CHANNEL:	1175 (High)		_
MEASURED OUTPUT POWER:	25.251	dBm =	<u>0.335</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	38.25	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBi)	LEVEL (dBm)	(H/V)	(dBc)
3817.50	-44.33	8.70	-35.63	V	60.9
5726.25	-53.43	9.70	-43.73	V	69.0
7635.00	-63.69	9.90	-53.79	V	79.0
9543.75	-67.93	11.40	-56.53	V	81.8

NOTES:

Radiated Spurious Emission Measurements by Substitution Method

according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

PCTESTÔ PT. 22/24 REPORT	and a state of the		UG LG	Quality Manager
		Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 23 of 32



8.2 FREQUENCY STABILITY (AMPS)

OPERATING FREQUENCY: <u>836,490,040</u> Hz CHANNEL: <u>383</u>

REFERENCE VOLTAGE: <u>3.7</u> VDC

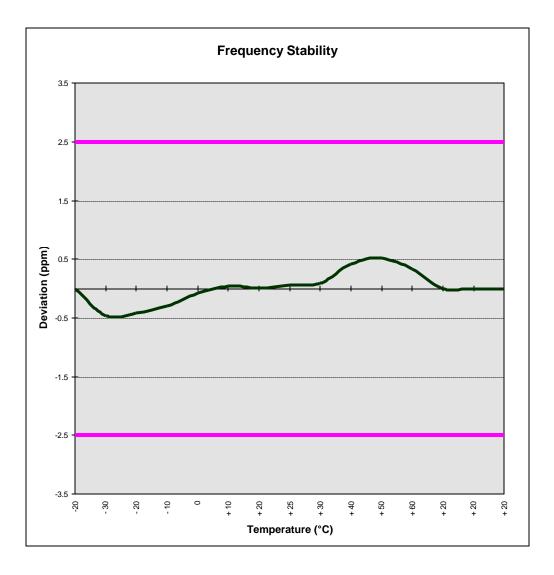
DEVIATION LIMIT: <u>± 0.00025</u>% or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQ. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	836,490,040	0.000000
100 %		- 30	836,490,425	-0.000046
100 %		- 20	836,490,391	-0.000042
100 %		- 10	836,490,291	-0.000030
100 %		0	836,490,107	-0.000008
100 %		+ 10	836,490,007	0.000004
100 %		+ 20	836,490,032	0.000001
100 %		+ 25	836,489,990	0.000006
100 %		+ 30	836,489,965	0.000009
100 %		+ 40	836,489,689	0.000042
100 %		+ 50	836,489,605	0.000052
100 %		+ 60	836,489,764	0.000033
85 %	3.15	+ 20	836,490,040	0.000000
115 %	4.26	+ 20	836,490,040	0.000000
BATT. ENDPOINT	2.94	+ 20	836,490,040	0.000000

PCTESTÔ PT. 22/24 REPORT	POTENT FO	FCC MEASUREMENT REPORT			
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 24 of 32	
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8.3 FREQUENCY STABILITY (AMPS)



PCTESTÔ PT. 22/24 REPORT	POTENT FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 25 of 32
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8.4 FREQUENCY STABILITY (CDMA)

OPERATING FREQUENCY:	836,490,008	Hz
CHANNEL:	0383	
REFERENCE VOLTAGE:	3.7	VDC

DEVIATION LIMIT: <u>± 0.00025</u>% or 2.5 ppm LGE

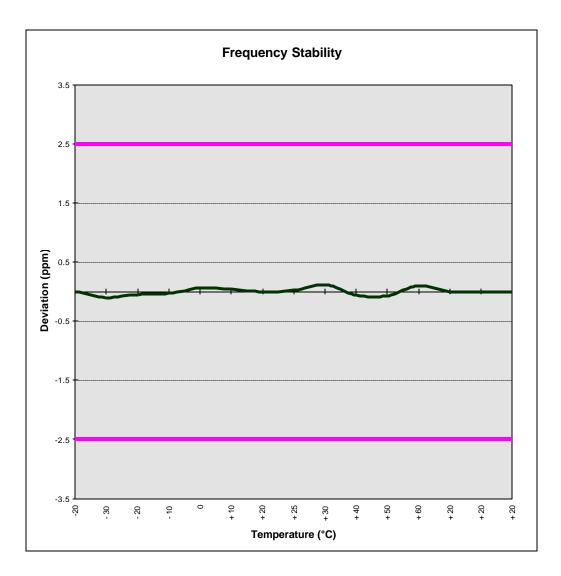
CDMA 800

VOLTAGE	POWER	ТЕМР	FREQ.	Deviation
(%)	(VDC)	(°C)	(Hz)	(%)
100 %	3.70	+ 20 (Ref)	836,490,008	0.000000
100 %		- 30	836,490,092	-0.000010
100 %		- 20	836,490,050	-0.000005
100 %		- 10	836,490,033	-0.000003
100 %		0	836,489,958	0.000006
100 %		+ 10	836,489,975	0.000004
100 %		+ 20	836,490,008	0.000000
100 %		+ 25	836,489,991	0.000002
100 %		+ 30	836,489,908	0.000012
100 %		+ 40	836,490,058	-0.000006
100 %		+ 50	836,490,067	-0.000007
100 %		+ 60	836,489,924	0.000010
85 %	3.17	+ 20	836,490,008	0.000000
115 %	4.26	+ 20	836,490,008	0.000000
BATT. ENDPOINT	2.93	+ 20	836,490,008	0.000000

PCTESTÔ PT. 22/24 REPORT	POTENT FO	FCC MEASUREMENT REPORT		Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 26 of 32
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8.5 FREQUENCY STABILITY (CDMA)



PCTESTÔ PT. 22/24 REPORT	-VPGTERT FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager		
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 27 of 32		
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8.6 FREQUENCY STABILITY (PCS)

 OPERATING FREQUENCY:
 1,880,000,011
 Hz

 CHANNEL:
 600

REFERENCE VOLTAGE: <u>3.7</u> VDC

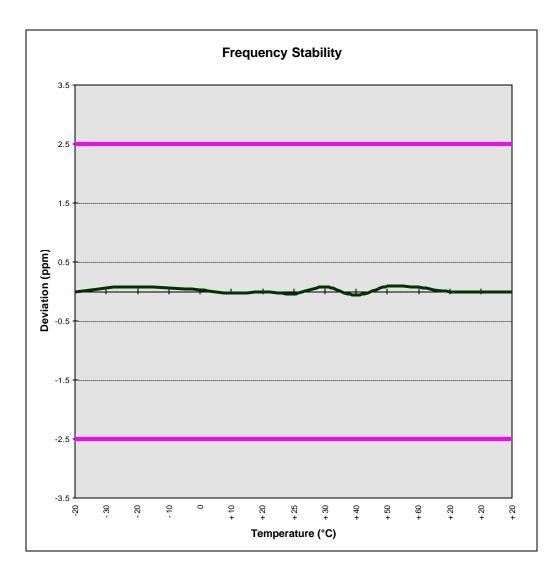
DEVIATION LIMIT: <u>± 0.00025</u> % or 2.5 ppm

VOLTAGE	POWER	TEMP	FREQ.	Deviation
(%)	(VDC)	(°C)	(Hz)	(%)
100 %	3.70	+ 20 (Ref)	1,880,000,011	0.000000
100 %		- 30	1,879,999,898	0.000006
100 %		- 20	1,879,999,861	0.00008
100 %		- 10	1,879,999,898	0.000006
100 %		0	1,879,999,955	0.000003
100 %		+ 10	1,880,000,067	-0.000003
100 %		+ 20	1,880,000,011	0.000000
100 %		+ 25	1,880,000,086	-0.000004
100 %		+ 30	1,879,999,861	0.00008
100 %		+ 40	1,880,000,124	-0.000006
100 %		+ 50	1,879,999,842	0.000009
100 %		+ 60	1,879,999,879	0.000007
85 %	3.17	+ 20	1,880,000,011	0.000000
115 %	4.26	+ 20	1,880,000,011	0.000000
BATT. ENDPOINT	2.94	+ 20	1,880,000,011	0.000000

PCTESTÔ PT. 22/24 REPORT	POTENT			Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 28 of 32
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8.7 FREQUENCY STABILITY (PCS)



PCTESTÔ PT. 22/24 REPORT	POTENT	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 29 of 32
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9.1 PLOT(S) OF EMISSIONS

(SEE ATTACHMENT D)

PCTESTÔ PT. 22/24 REPORT	POTEST FO	CC MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 30 of 32
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10.1 TEST EQUIPMENT

Туре	Model	Cal. Due Date	S/N	
Microwave Spectrum Analyzer	8566B (100Hz-22GHz) HP 08/15/05		3638A08713	
Microwave Spectrum Analyzer	HP 8566B (100Hz-22GHz) 04/17/05		2542A11898	
Spectrum Analyzer/Tracking Gen.	HP 8591A (100Hz-1.8GHz)	08/10/05	3144A02458	
Signal Generator*	HP 8640B (500Hz-1GHz)	06/03/05	2232A19558	
Signal Generator*	HP 8640B (500Hz-1GHz)	06/03/05	1851A09816	
Signal Generator*	Rohde & Schwarz (0.1-1000MHz)	09/11/05	894215/012	
Ailtech/Eaton Receiver	NM 37/57A-SL (30-1000MHz)	04/12/05	0792-032	
Ailtech/Eaton Receiver	NM 37/57A (30-1000MHz)	03/11/05	0805-03334	
Ailtech/Eaton Receiver	NM17/27A (0.1-32MHz)	09/17/04	0608-03241	
Quasi-Peak Adapter	HP 85650Å	08/15/05	2043A00301	
Ailtech/Eaton Adapter	CCA-7 CISPR/ANSI OP Adapter	03/11/05	0194-04082	
Gigatronics Universal Power Meter	, 8657A		1835256	
Gigatronics Power Sensor	80701A (0.05-18GHz)		1833460	
Signal Generator	HP 8648D (9kHz-4GHz)		3613A00315	
Amplifier Research	5S1G4 (5W, 800MHz-4.2GHz)		22322	
Vetwork Analyzer	HP 8753E (30kHz-3GHz)		JP38020182	
Audio Analyzer	HP 8903B		3011A09025	
Modulation Analyzer	HP 8901A	2432A03467		
Power Meter	HP 437B	3125U24437		
Power Sensor	НР 8482Н (ЗОЦИ-ЗИ)	2237A02084		
Harmonic/Flicker	Test System HP 6841A (IEC 555-2	3531A00115		
Broadband Amplifier (2)	HP 8447D		1145A00470, 1937A03348	
Broadband Amplifier	HP 8447F		2443A03784	
Horn Antenna	EMCO Model 3115 (1-18GHz)		9704-5182	
Horn Antenna	EMCO Model 3115 (1-18GHz)		9205-3874	
Horn Antenna	EMCO Model 3116 (18-40GHz)		9203-2178	
Biconical Antenna (4)	Eaton94455/Eaton94455-1/Singer9445	5-1/ambareDesim	1295, 1332, 0355	
Log-Spiral Antenna (3)	Ailtech/Eaton 93490-1	0608, 1103, 1104		
Roberts Dipoles	Compliance Design (1 set)		0000,1100,1101	
Ailtech Dipoles	DM-105A (1 set)		33448-111	
EMCOLISN (6)	3816/2	1079		
Microwave Preamplifier 40dB	Gain HP 83017A (0.5-26.5GHz)	3123A00181		
Vicrowave Cables	MicroCoax (1.0-26.5GHz)			
Ailtech/Eaton Receiver	NM37/57A-SL		0792-03271	
Spectrum Analyzer	HP 8594A		3051A00187	
Spectrum Analyzer (2)	HP 8591A	3034A01395, 3108A020		
Microwave Survey Meter	Holaday Model 1501 (2.450GHz)	80931		
Digital Thermometer	Extech Instruments 421305	426966		
Attenuator	HP 8495A (0-70dB) DC-4GHz			
Bi-Directional Coax Coupler	Narda 3020A (50-1000MHz)			
Shielded Screen Room	RF Lindgren Model 26-2/2-0		6710 (PCT270)	
Shielded Semi-Anechoic Chamber	Ray Proof Model S81		R2437 (PCT278)	
inviroued Serni-Anechoic Chamber Ray Provincied Serni Inviromental Chamber Associated Systems Model 1025 (Temperature/Humidity)			PCT285	
* Calibration traceable to the National Institute of Standards and Technology (NIST).				

PCTESTÔ PT. 22/24 REPORT	POTENT FC	C MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 31 of 32
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11.1 SAMPLE CALCULATIONS

A. Emission Designator

Emission Designator = 1M25F9W

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

Emission Designator = 40K0F8W

Calculation:	Voice + SAT
Modulation:	Voice is 2.5 kHz and SAT is 6 kHz – Maximum modulation is M = 6 kHz
Deviation:	Voice is 12 kHz and SAT is 2 kHz – Maximum deviation is D = 12 + 2 = 14 kHz
Bn =	2xM + 2xDK with K = 1
Bn =	40 kHz
Calculation:	Signaling Tone (ST) + SAT
Modulation:	ST is 10 kHz and SAT is 6 kHz – Maximum modulation is M = 10 kHz
Deviation:	ST is 8 kHz and SAT is 2 kHz – Maximum deviation is D = 8 + 2 = 10 kHz
Bn =	2xM + 2xDK with K = 1
Bn =	40 kHz

Emission Designator = 40K0F1D

Calculation:Voice + SATModulation:Wideband Data is 10 kHz and SAT is 6 kHz – Maximum modulation is M = 10 kHzDeviation:Wideband Data is 8 kHz and SAT is 2 kHz – Maximum deviation is D = 8 + 2 = 10 kHzBn =2xM + 2xDK with K = 1Bn =40 kHz

B. Spurious Radiated Emission - PCS Band

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

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

PCTESTÔ PT. 22/24 REPORT	POTERT	FCC MEASUREMENT REPORT		Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type: Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 32 of 32
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12.1 CONCLUSION

The data collected shows that the LG Electronics Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA) FCC ID: BEJAX5000 complies with all the requirements of Parts 2, 22, and 24 of the FCC rules.

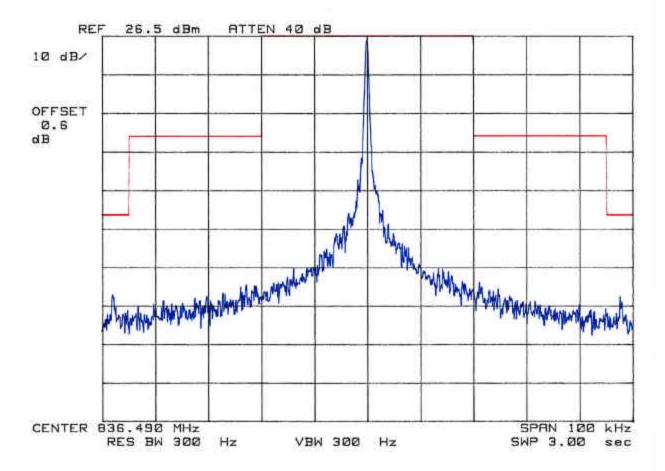
PCTESTÔ PT. 22/24 REPORT	POTENT FO	C MEASUREMENT REP	ORT 🚯 LG	Reviewed By: Quality Manager
Test Report S/N: 22/24.240913531.BEJ	Test Dates: Sept. 13-15, 2004	Phone Type : Tri-Mode Dual-Band	FCC ID: BEJAX5000	Page 33 of 32
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SPECTRUM ANALYZER PRESENTATION

FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm

Test Mode:Unmodulated Signal

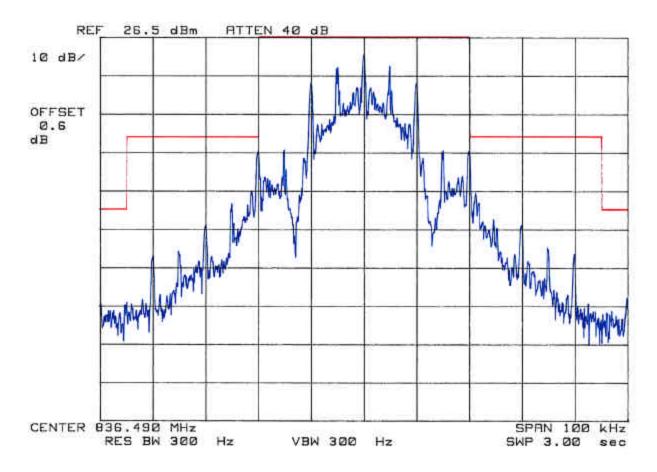


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SPECTRUM ANALYZER PRESENTATION

FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm

Test Mode:Wide Band Data

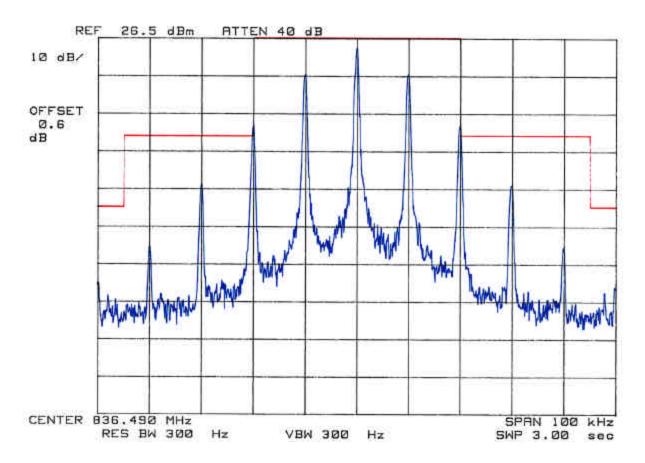


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SPECTRUM ANALYZER PRESENTATION

FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm



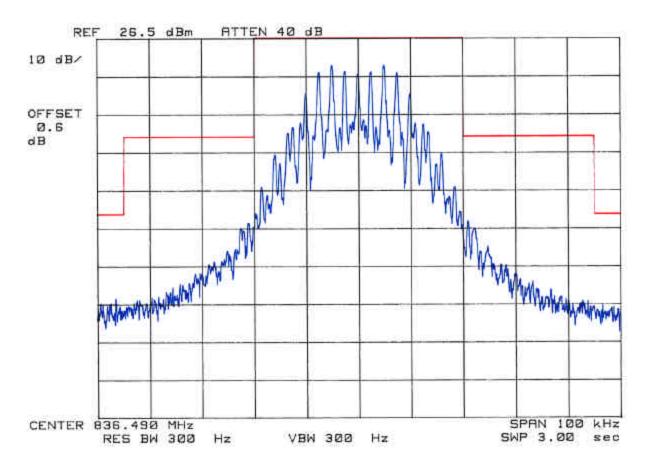


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SPECTRUM ANALYZER PRESENTATION

FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm

Test Mode:SAT + Voice

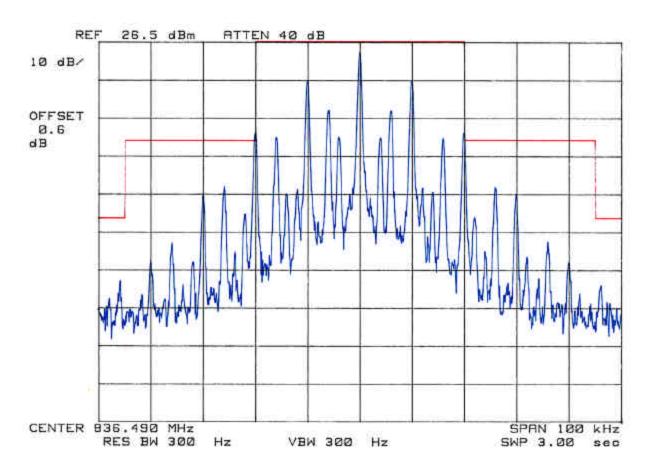


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SPECTRUM ANALYZER PRESENTATION

FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm



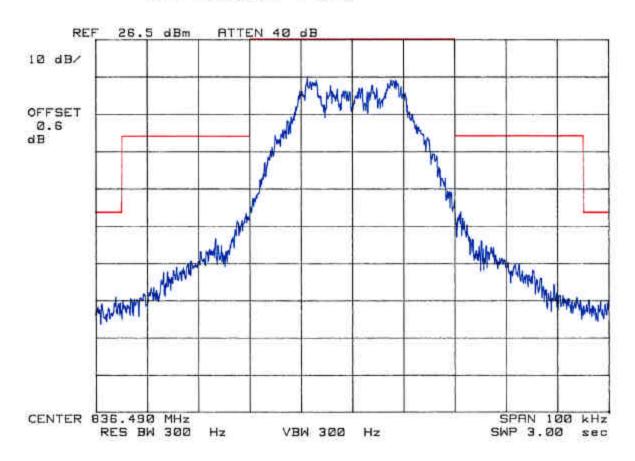
Test Mode:SAT + ST

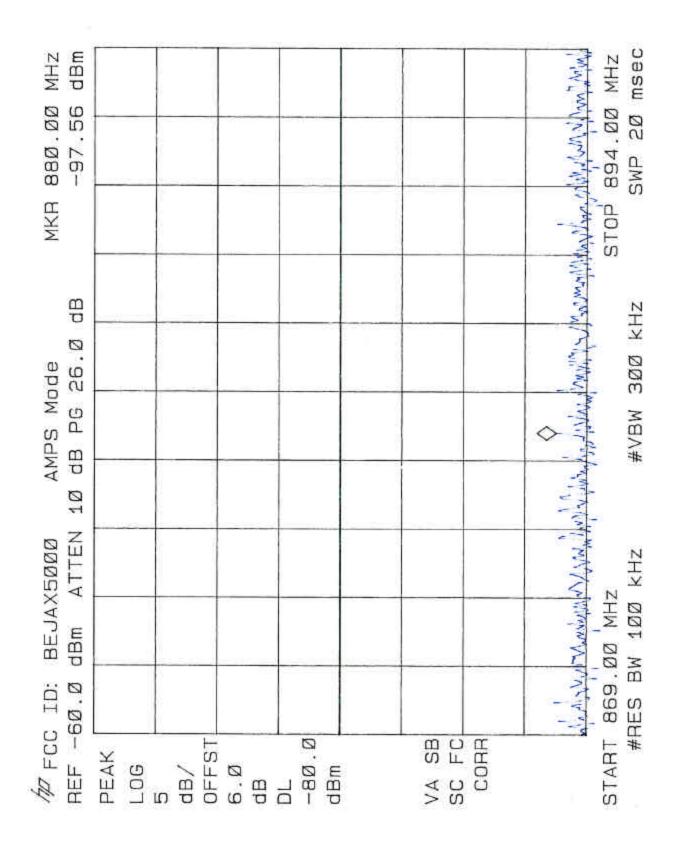
PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

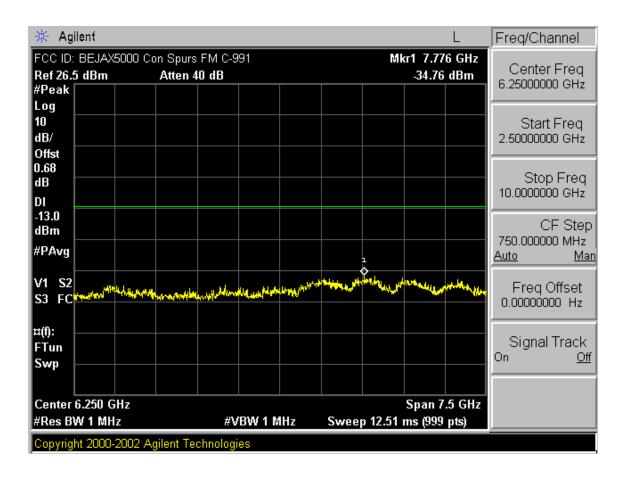
FCC ID:BEJAX5000 LG Electronics Tri-Mode Phone FM Channel 383 Operating Frequency: 836.490 MHz Output Power : 26.5 dBm

Test Mode:SAT + DTMF





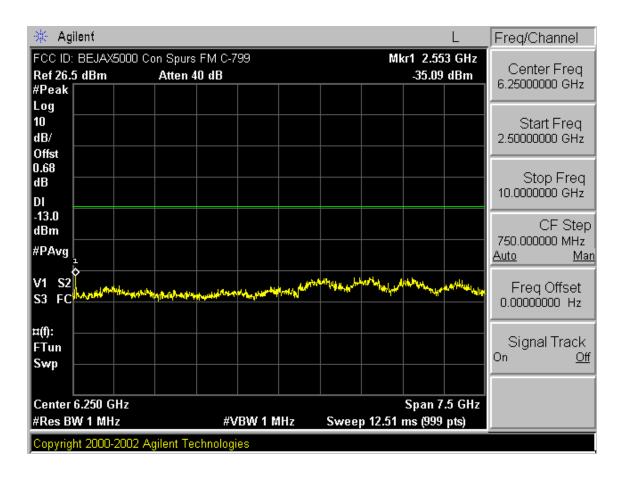
🔆 Agilent			L	Freq/Channel
Ref 26.5 dBm #Peak	Con Spurs FM C-991 Atten 40 dB	Mkr1 1. -25.	649 GHz 15 dBm	Center Freq 1.25500000 GHz
Log 10 dB/ Offst				Start Freq 10.000000 MHz
0.68 dB				Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg				CF Step 249.000000 MHz <u>Auto Man</u>
V1 S2 S3 FC	anter a second and the second s	and and a state of the state of	rethington and	Freq Offset 0.00000000 Hz
¤(f): FTun Swp				Signal Track ^{On <u>Off</u>}
Center 1.255 GHz #Res BW 1 MHz	#VBW 1 M		2.49 GHz 19 pts)	
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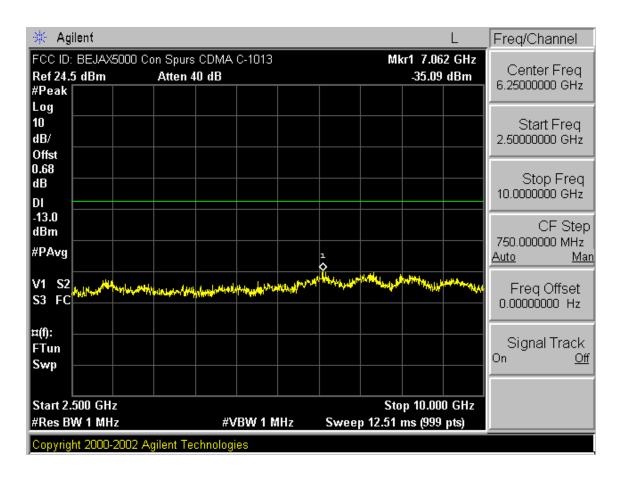
🔆 Agilent		L	Freq/Channel
Ref 26.5 dBm #Peak	Con Spurs FM C-383 Atten 40 dB	Mkr1 1.674 GH -24.03 dBm	Contor Eroa
Log 10 dB/ Offst			Start Freq 10.0000000 MHz
0.68 dB DI			Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg			CF Step 249.000000 MHz <u>Auto Man</u>
V1 S2 S3 FC _{ptu(} n) (Jake)	shiqubalestrugereen Connyight sorrester line	alage, www.energy.h.e	Freq Offset 0.00000000 Hz
¤(f): FTun Swp			Signal Track On <u>Off</u>
Center 1.255 GHz #Res BW 1 MHz	#VBW 1 MI	Span 2.49 GH Iz Sweep 4.192 ms (999 pts)	z
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🔆 Agilent				L	Freq/Channel
Ref 26.5 dBm #Peak	IO Con Spurs FM C-3 Atten 40 dB	33		032 GHz 01 dBm	Center Freq 6.25000000 GHz
Log 10 dB/ Offst					Start Freq 2.50000000 GHz
0.68 dB DI					Stop Freq 10.0000000 GHz
-13.0 dBm #PAvg					CF Step 750.000000 MHz <u>Auto Ma</u> i
V1 S2 S3 FC	Million and an adalight and all and a second a	shine with the specification of the	Harrison Harrison of the State	ing of the Arming Ages	Freq Offset 0.00000000 Hz
¤(f): FTun Swp					Signal Track ^{On <u>Off</u>}
Center 6.250 GHz #Res BW 1 MHz		BW 1 MHz	Spai Sweep 12.51 ms (9	1 7.5 GHz 99 pts)	
Copyright 2000-200	02 Agilent Technologi	es			

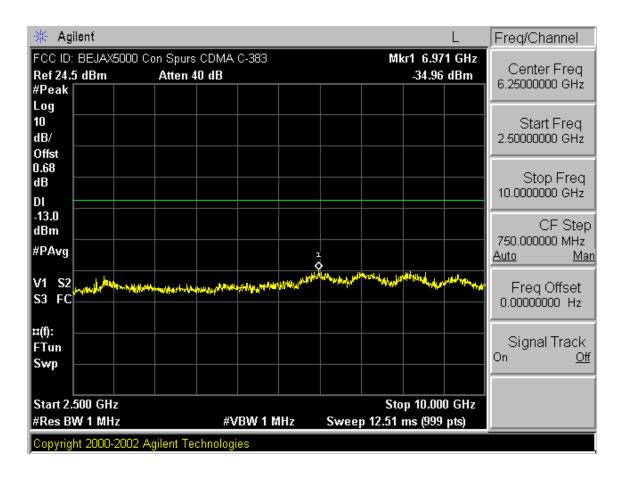
🔆 Agilent				L	Freq/Channel
FCC ID: BEJAX50 Ref 26.5 dBm #Peak	00 Con Spurs FM C-799 Atten 40 dB		Mkr1 1.69 -21.97	9 GHz dBm	Center Freq 1.25500000 GHz
Log 10 dB/ Offst					Start Freq 10.000000 MHz
0.68 dB DI					Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg					CF Step 249.000000 MHz <u>Auto Man</u>
V1 S2 S3 FC	and the sally served by the second	ารรูปที่สสูบได้สาวอาการและก	و بد بالدور و الدور و بالدور و	d _{ara} by yaharipat a	Freq Offset 0.00000000 Hz
¤(f): FTun Swp					Signal Track On <u>Off</u>
Center 1.255 GH #Res BW 1 MHz		W1MHz Sw	Span 2. span 2. eep 4.192 ms (999		
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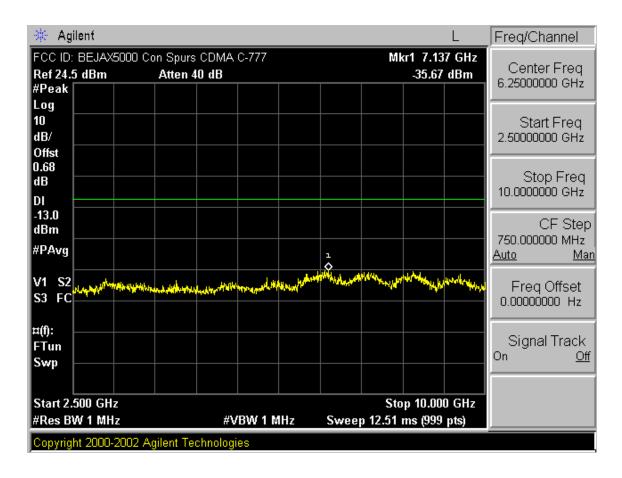
🔆 Agilent		L	Freq/Channel
#Peak	n Spurs CDMA C-1013 Atten 40 dB	Mkr1 1.649 GHz -26.21 dBm	Center Freq 1.25500000 GHz
Log 10 dB/ Offst			Start Freq 10.000000 MHz
0.68 dB DI			Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg		⊥ ◆	CF Step 249.00000 MHz <u>Auto Man</u>
V1 S2 S3 FC	monoritary with the property in the second	apart biles and some states	Freq Offset 0.00000000 Hz
¤(f): FTun Swp			Signal Track ^{On <u>Off</u>}
Start 10 MHz #Res BW 1 MHz	#VBW 1 MHz	Stop 2.500 GHz Sweep 4.192 ms (999 pts)	
Copyright 2000-2002 Agi	ilent Technologies		

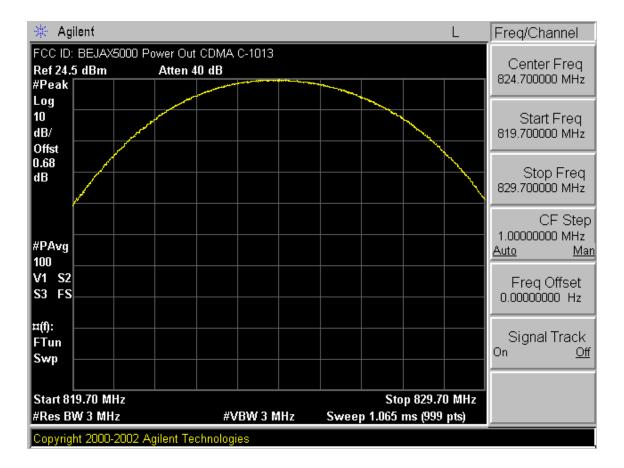


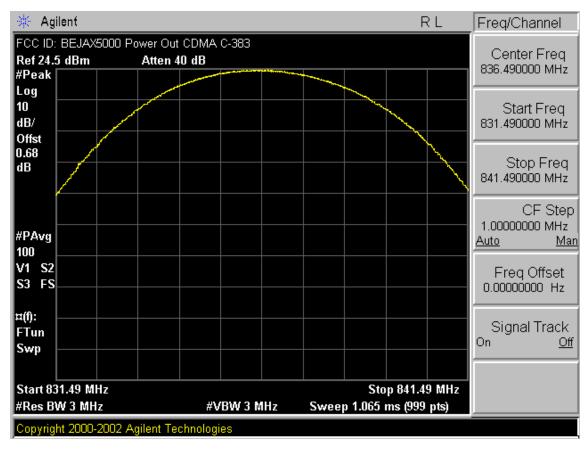
🔆 Agilent			L Freq/Channel
FCC ID: BEJAX5000 Co Ref 24.5 dBm #Peak	n Spurs CDMA C-383 Atten 40 dB	Mkr1 1.672 -25.51	Contor Eroa
Log 10 dB/ Offst			Start Freq 10.0000000 MHz
0.68 dB DI			Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg			CF Step 249.000000 MHz <u>Auto Man</u>
V1 S2 S3 FC	warmington and longer barried in a sign	arganan shakara ayan daga ayan aran yanga aran aran yangan aran yangan aran yangan aran yangan aran yangan yan	Freq Offset 0.00000000 Hz
¤(f): FTun Swp			Signal Track On <u>Off</u>
Start 10 MHz #Res BW 1 MHz	#VBW 1 MH	Stop 2.500 z Sweep 4.192 ms (999	
Copyright 2000-2002 Ag	jilent Technologies		

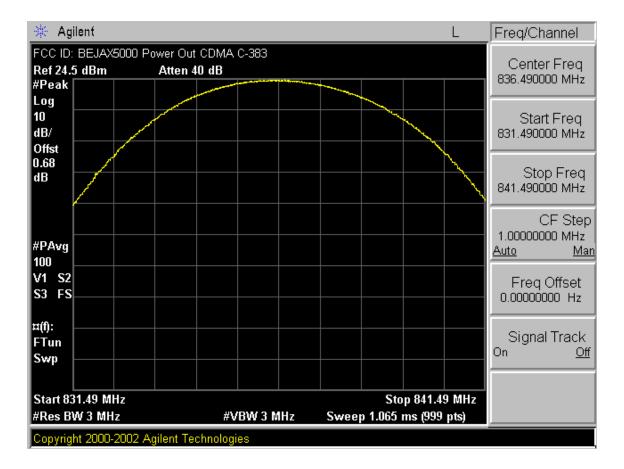


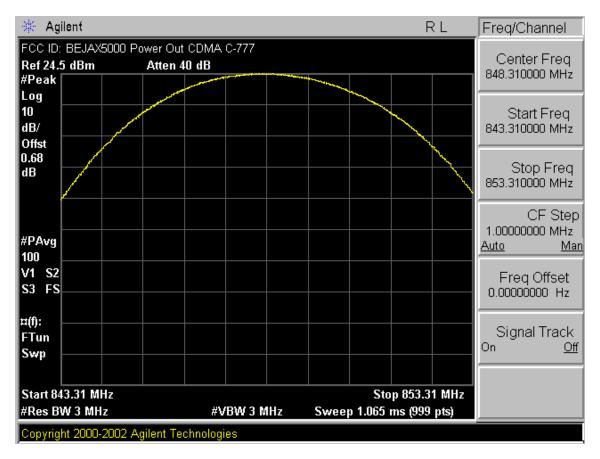
🔆 Agilent			L	Freq/Channel
FCC ID: BEJAX5000 C Ref 24.5 dBm #Peak	on Spurs CDMA C-777 Atten 40 dB		.697 GHz .70 dBm	Center Freq 1.25500000 GHz
Log 10 dB/ Offst				Start Freq 10.0000000 MHz
0.68 dB DI				Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg		1 (CF Step 249.000000 MHz Auto Man
V1 S2 S3 FC	ab-househouse laturations		er og aft for her berever to for	Freq Offset 0.00000000 Hz
¤(f): FTun Swp				Signal Track On <u>Off</u>
Start 10 MHz #Res BW 1 MHz	#VBW 1 M		500 GHz 999 pts)	
Copyright 2000-2002 A	gilent Technologies			

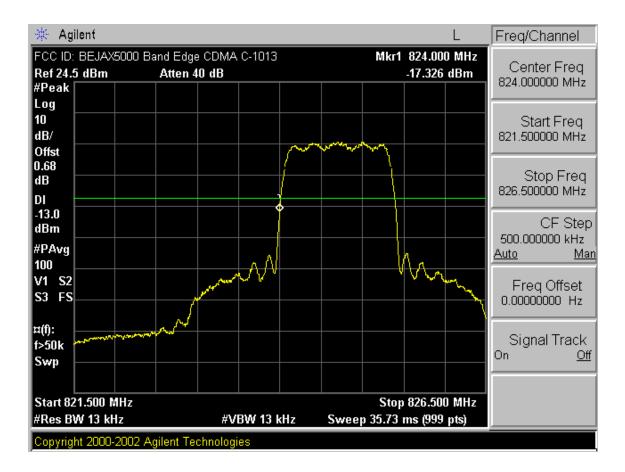


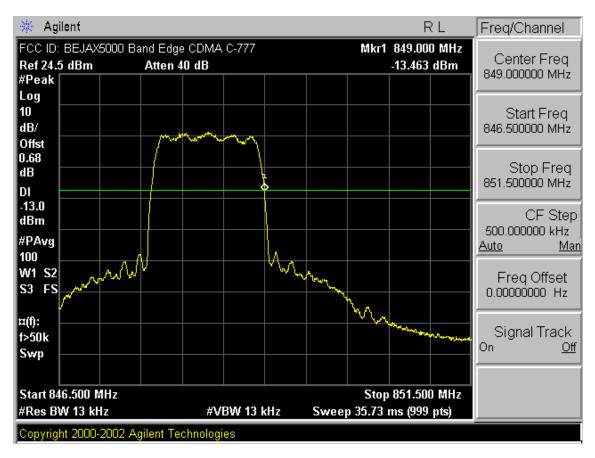


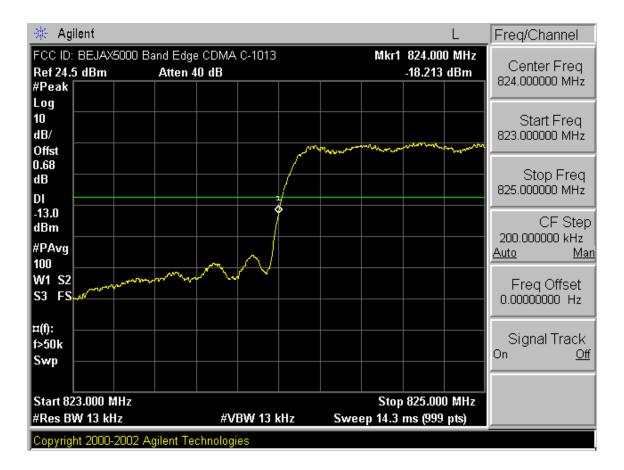


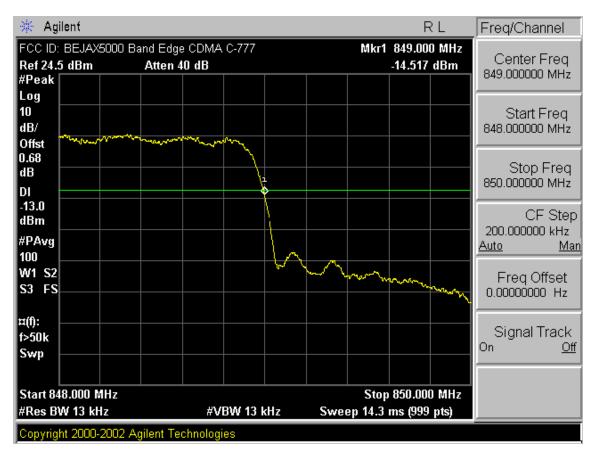




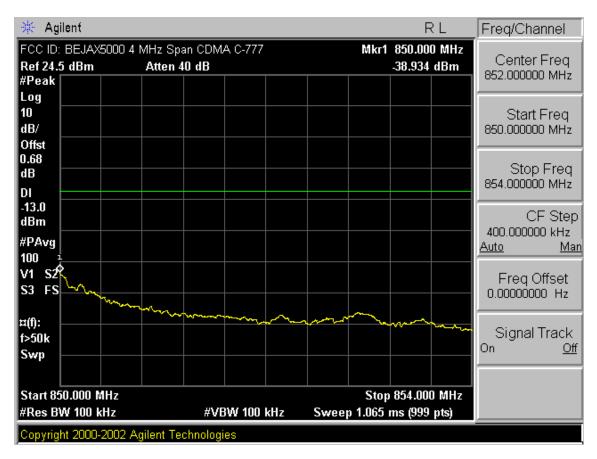


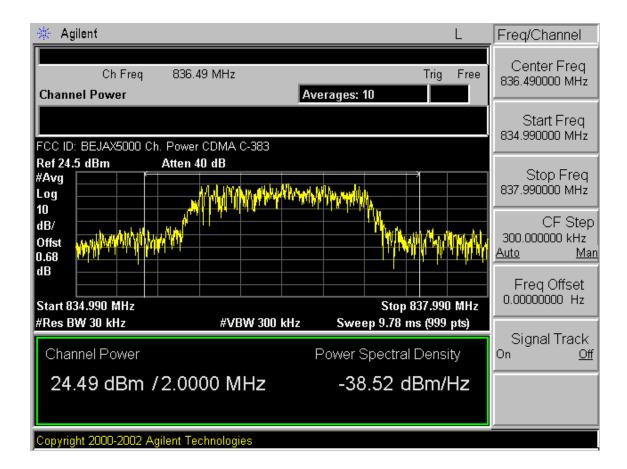


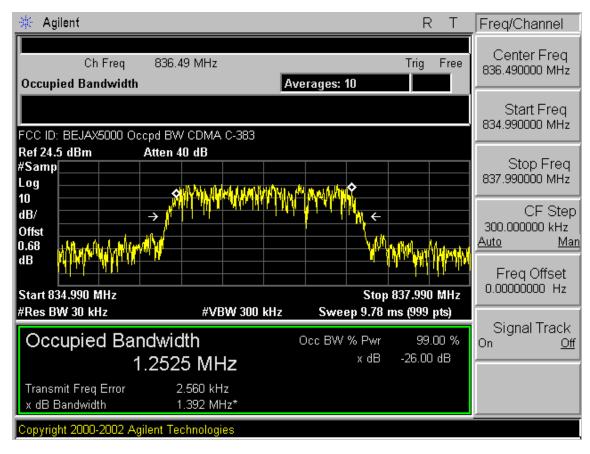


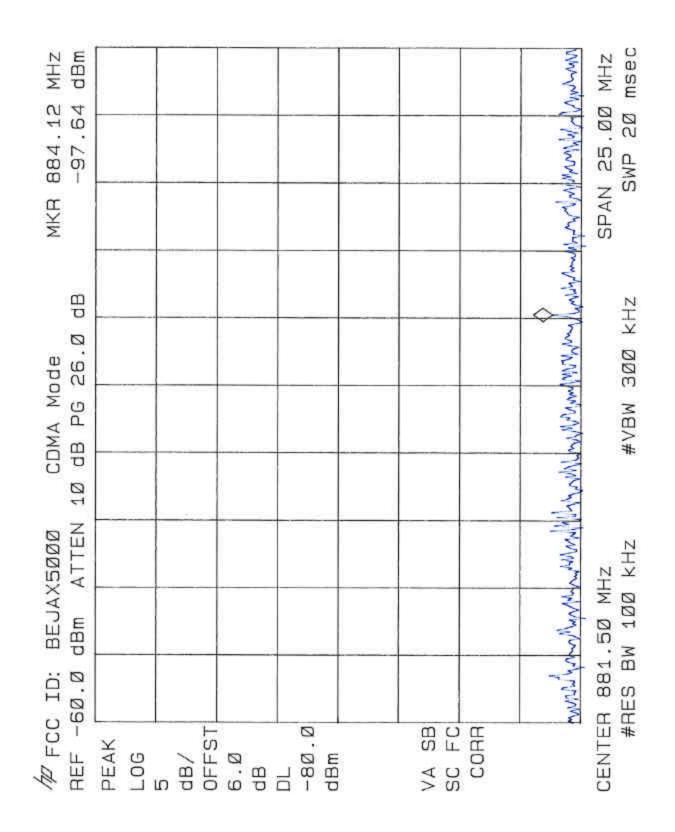


🔆 Agilent		RL	Freq/Channel
Ref 24.5 dBm #Peak	4 MHz Span CDMA C-1013 Atten 40 dB	Mkr1 823.000 MHz -36.370 dBm	Center Freq 821.000000 MHz
Log 10 dB/ Offst			Start Freq 819.00000 MHz
0.68 dB			Stop Freq 823.00000 MHz
-13.0 dBm #PAvg			CF Step 400.000000 kHz Auto Man
100 V1 S2 S3 FS			Freq Offset 0.00000000 Hz
¤(f): f>50k Swp			Signal Track On <u>Off</u>
Start 819.000 MHz #Res BW 100 kHz	#VBW 100 kHz	Stop 823.000 MHz Sweep 1.065 ms (999 pts)	
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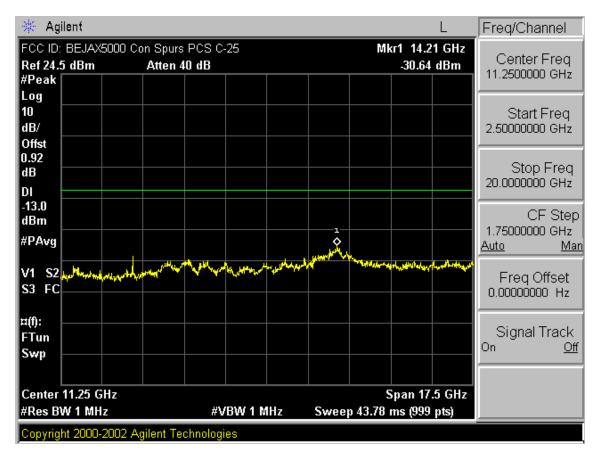




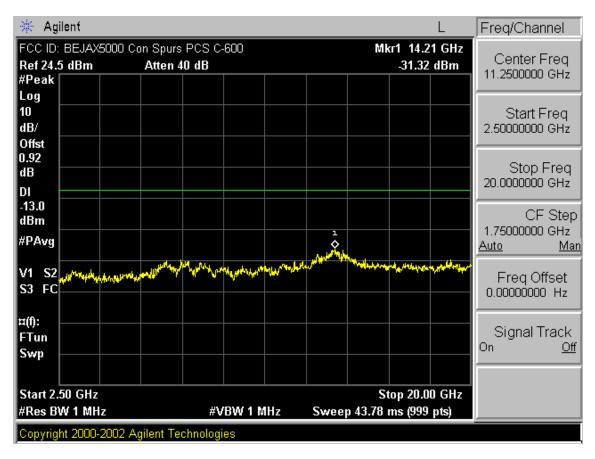


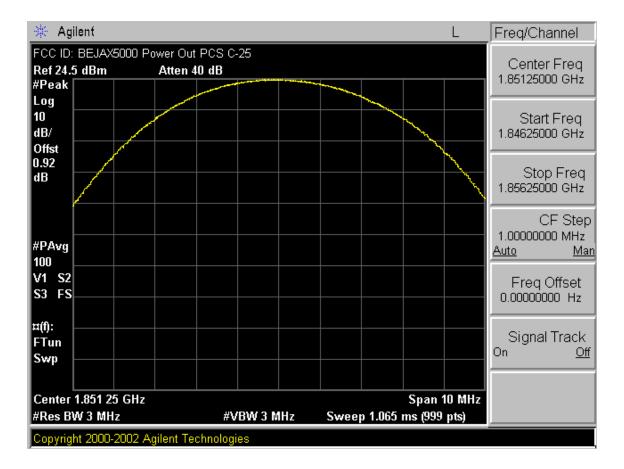


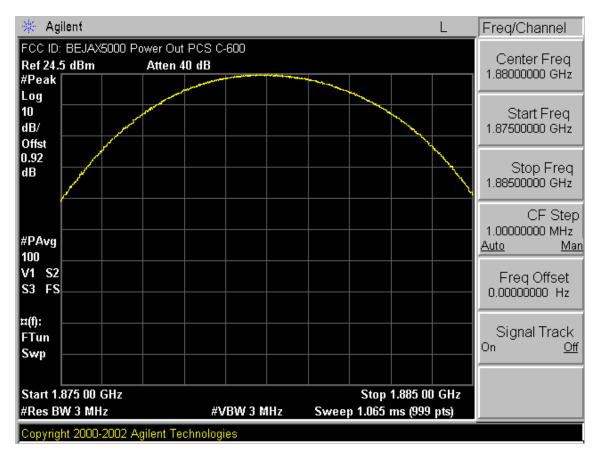
🔆 Agilent			L	Freq/Channel
Ref 24.5 dBm #Peak	0 Con Spurs PCS C-25 Atten 40 dB		Mkr1 2.083 GHz _40.19 dBm	Center Freq 1.25500000 GHz
Log 10 dB/				Start Freq 10.0000000 MHz
Offst 0.92 dB DI				Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg				CF Step 249.000000 MHz <u>Auto M</u> an
V1 S2 S3 FC	fynser jaren er en en fer ^{gen} ned fêr witer sjil pennel sjer	ung haak hadan an haada haa	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Freq Offset 0.00000000 Hz
#(f): FTun Swp				Signal Track On <u>Off</u>
Center 1.255 GHz #Res BW 1 MHz	#VBW 1	MHz Sweep 4	Span 2.49 GHz .192 ms (999 pts)	
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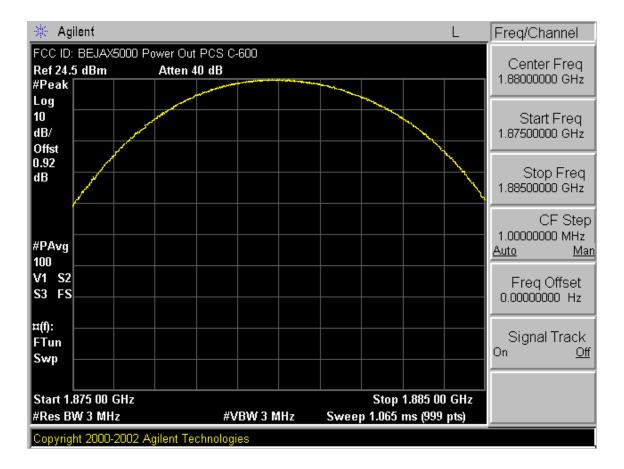


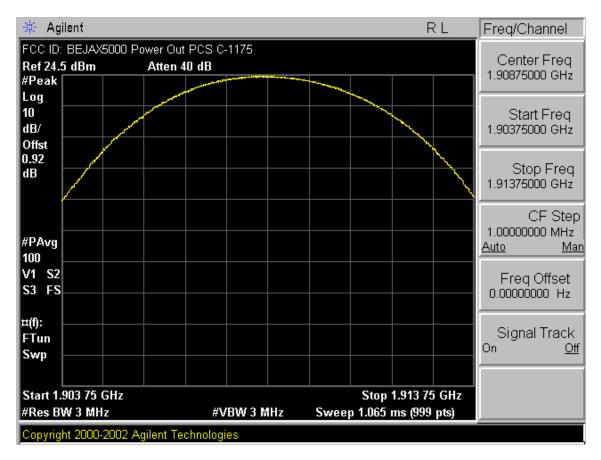
🔆 Agilent		L	Freq/Channel
#Peak	n Spurs PCS C-600 Atten 40 dB	Mkr1 2.460 GHz -39.42 dBm	Center Freq 1.2550000 GHz
Log 10 dB/ Offst			Start Freq 10.000000 MHz
0.92 dB DI			Stop Freq 2.5000000 GHz
-13.0 dBm #PAvg			CF Step 249.00000 MHz <u>Auto Man</u>
V1 S2 S3 FC	to ye we have the stand of the	Lashon of the second seco	Freq Offset 0.00000000 Hz
¤(f): FTun Swp			Signal Track ^{On <u>Off</u>}
Start 10 MHz #Res BW 1 MHz	#VBW 1 MHz	Stop 2.500 GHz Sweep 4.192 ms (999 pts)	
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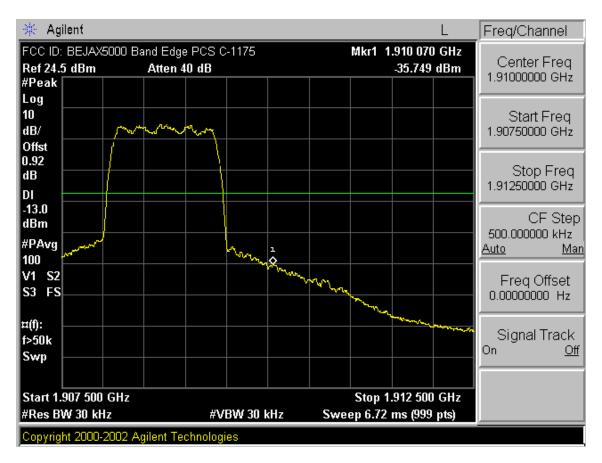




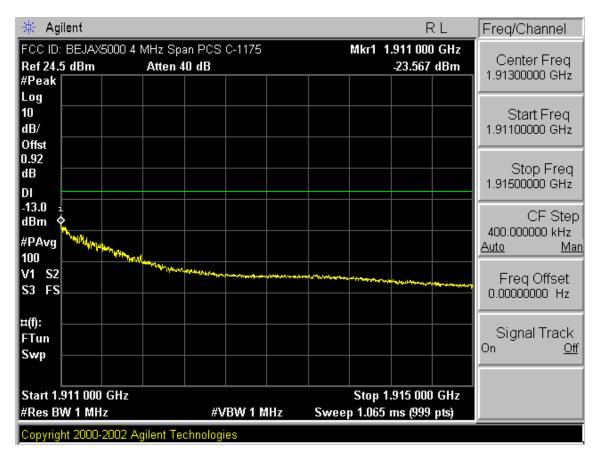


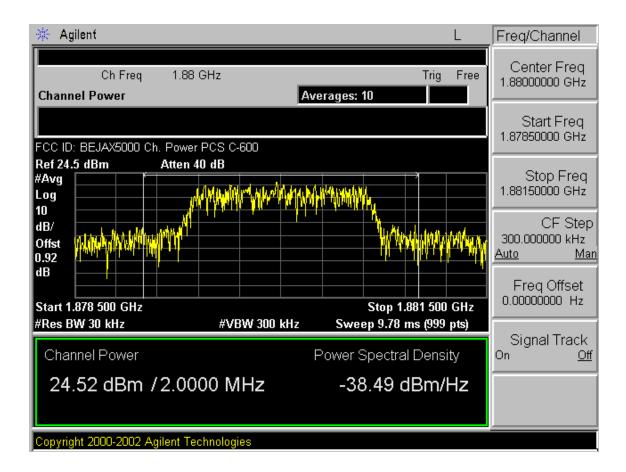


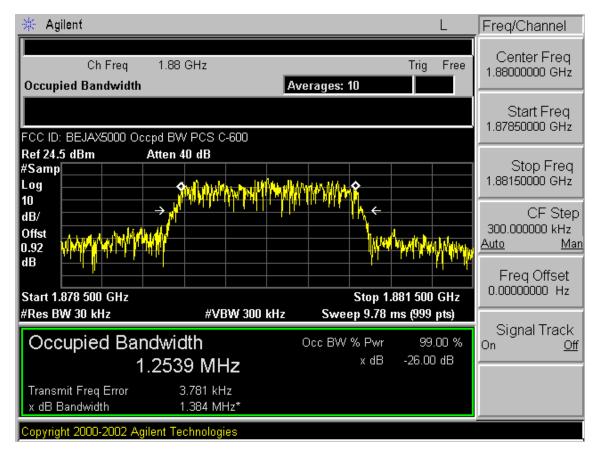
🔆 Agilent				L	Freq/Channel
FCC ID: BEJAX5000 B: Ref 24.5 dBm #Peak	and Edge PCS C-25 Atten 40 dB		Mkr1 1.850 000 -33.902		Center Freq 1.8500000 GHz
Log 10 dB/ Offst			m		Start Freq 1.84750000 GHz
0.92 dB DI					Stop Freq 1.85250000 GHz
-13.0 dBm #PAvg 100		in.		<u>~</u>	CF Step 500.000000 kHz <u>Auto Man</u>
V1 S2 S3 FS	and the second sec				Freq Offset 0.00000000 Hz
#(f): ************************************					Signal Track On <u>Off</u>
Center 1.850 000 GHz #Res BW 30 kHz	#VBW 30	kHz Swe	Span ep 6.72 ms (999	5 MHz pts)	
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🔆 Agilent		RL	Freq/Channel
Ref 24.5 dBm #Peak	MHz Span PCS C-25 Atten 40 dB	Mkr1 1.849 000 GHz -21.613 dBm	Center Freq 1.84700000 GHz
Log 10 dB/ Offst			Start Freq 1.84500000 GHz
0.92 dB DI			Stop Freq 1.8490000 GHz
-13.0 dBm #PAvg		and the second sec	CF Step 400.000000 kHz <u>Auto Man</u>
100 V1 S2 S3 FS			Freq Offset 0.00000000 Hz
¤(f): FTun Swp			Signal Track ^{On <u>Off</u>}
Center 1.847 000 GH #Res BW 1 MHz	#VBW 1 MHz	Span 4 MHz Sweep 1.065 ms (999 pts)	
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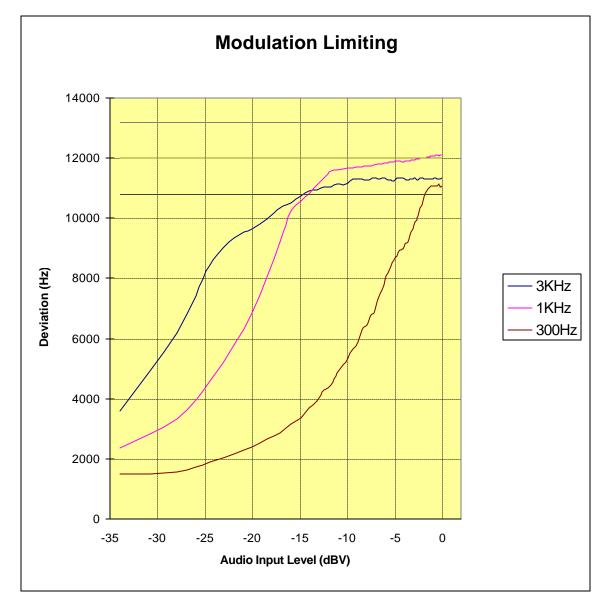
PCTEST Engineering Lab., Inc.

SUBJECT: Modulation Characteristics FCC Part 24/22
 Test Report No.:
 22/24.240913531.BEJ

 Test Date:
 09.13.2004

- **EUT:** Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA)
- Model: AX5000
- FCC ID: BEJAX5000





PCTEST Engineering Lab., Inc.

SUBJECT:	Modulation Characteristics
	FCC Part 24/22

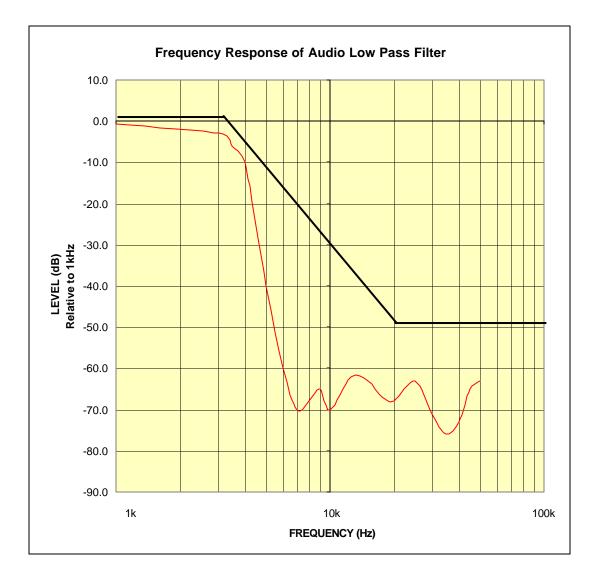
Test Report No.: 22/24.240913531.BEJ Test Date:

09.13.2004

EUT: Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA) Model: AX5000

FCC ID: BEJAX5000

REFERENCE: 1 kHz = 0 dB



PCTEST Engineering Lab., Inc.

SUBJECT:	Modulation Characteristics
	FCC Part 24/22

Test Date:

Test Report No.: 22/24.240913531.BEJ 09.13.2004

EUT: Tri-Mode Dual-Band Analog/PCS Phone (AMPS/CDMA) Model: AX5000

FCC ID: BEJAX5000

REFERENCE: 1 kHz = 0 dB

