FCC PART 15, (August 14, 2006)

EMI TEST REPORT

FOR

The Original BlackJack FM Radio Handsfree Device
TRADE NAME: BlackJack
MODEL: BJ-1
FCC ID: U5J-BJ-1

Prepared for

BLACKJACK HANDSFREE CORPORATION
5261 PEARCE DRIVE
HUNTINGTON BEACH, CA 92649, USA

Tested & Approved By: KR Chaklashiya
Kumar Chaklashiya, Technical Expert

Sample Received date: 02/16/2007
Test Date(s): 02/16-4/27-2007

Test Location

GLOBAL TESTING
4183 RIVERVIEW DRIVE
RIVERSIDE, CA 92509, USA

CAB # US0126

NVLAP®
NVLAP Lab Code: 200436-0

www.Global-Testing.com

The results in this report apply only to the sample tested.
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Total Pages: 33 (Including Appendixes A to F)

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1.0 Certification:

Applicant Company	Blackjack Handsfree Corporation
EUT Name	The Original BlackJack FM Radio Handsfree Device
Trade Name	BlackJack
Model Number(s)	BJ-1
Serial Number	Not Present
FCC ID	U5J-BJ-1
Working Frequency	88.675 MHz FM
Power Supply	3Vdc Coin Battery (CR2032)
Test Specification(s)	FCC Part 15.203, 15.209, 15.239 (August 14, 2006)
Test Method(s)	ANSI C63.4 (2003)
Test Level	Class B
Test Date(s)	Feb. 16 to April 27, 2007
The above described equipment has been tested by Global Testing, and found compliance with the requirement of the above listed Test Specification(s). The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.	
Tested By	
	Kumar Chaklashiya, EMC Engineer
Prepared By	
	Kumar Chaklashiya, Lab Manager
Approved By	
	Kumar Chaklashiya, Lab Manager
Test Location	Global Testing
	4183 Riverview Drive, Riverside, CA 92509
Company Name	Blackjack Handsfree Corporation
Contact Name	Mr. Jason A. Bobb
Applicant Company Responsible Party (Report Acceptance)	Name: _____ Signature: _____ Date: _____
Note: FCC Rules 2.955(a)(3)(x) requires that a FCC Test Report must be signed by " an Official of the Company responsible for the device".	

2.0 Summary of Test Results:

List of modification to the EUT during the testing:

(1) None.

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Comments
FCC Part, 15	15.207 - Conducted Emissions 150 KHz-30 MHz	Not applicable	The EUT Powered by 3Vdc Coin battery.
	15.209 - Radiated Emissions 30-1000 MHz	PASS	The EUT Meets the Class B Limit with 1.3 dB passing margin using Peak method.
FCC Part 15	15.239(a) – 200KHz Bandwidth	PASS	Limit is 200 kHz Max, Reading is 107.5 kHz (lie within 88 – 108 MHz)
FCC Part 15	15.239(b) – Fundamental Radiated Emissions 88-108 MHz	PASS	The EUT Meets the Class B Limit with 3.3 dB passing margin using Peak method (88.675 MHz)
FCC Part 15	15.203 Antenna Requirement	PASS	The EUT uses Fixed internal antenna.

Test Result Summary: The EUT meets the above listed FCC Part 15 test requirements. ***This test results applies only to the test sample Tested. The continuing compliance is the responsibility of the applicant company.***

Note: Pass/Fail determination is based upon the nominal values of the test data.

2.1 Measurement Uncertainty:

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Value
Radiated Emissions	±5.8 dB

2.2 NVLAP Statement:

This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

3.0 General Information:

3.1 General Description of the EUT:

EUT Description	The EUT (BlackJack) is a miniature hands-free device that plugs into the 2.5 mm output jack of a mobile phone. Working in conjunction with a FM radio, Blackjack provides hands-free speakerphone feature to any mobile phone. BlackJack has a built-in microphone that picks up the user's voice for outgoing transmission. It outputs the incoming audio or voice (via radio frequency) to a FM station on a car radio for listening. **The BlackJack Model BJ-1 does not have Tuning control function for the user.**
EUT M/N(s)	BJ-1
EUT S/N	Not Present
Working Freq.	88.675 MHz FM
Power Supply	3Vdc Coin battery (CR2032)
Data Cable	None.

3.2 Applicable FCC Rules:

Guidelines	FCC Part 15 Rules
Transmitter Characteristics	15.239
Spurious Radiated Power	15.205, 15.209, 15.239
Antenna Requirement	15.203

3.3 Description of the EUT Test Modes:

The EUT was tested with the above listed key components and configuration/mode is as listed below:

For Conducted Emissions Test	
Test Mode	**Description**
1	This Test is not applicable for this EUT.
For Radiated Emissions Test	
Test Mode	**Description**
1	The EUT was Plug into the AT&T Handset 2.5mm Headset Jack. The AT&T Handset was Continuously communicating with another AT&T Handset via intercom function. The EUT was operated in continuous transmit mode at max power frequency modulated with a simulated voice to measure fundamental, harmonics and spurious radiation.

For Occupied Bandwidth Measurement	
Test Mode	**Description**
1	The occupied bandwidth measurement was performed while Apple iPod playing MP3 Song with volume control set to maximum Level.

3.4 Description of Support Units:

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand Name	Model No.	Serial No.	FCC ID
1	Telephone Handset	AT&T	E5634B	Handset # 1	EW780-5348-01
2	Telephone Handset	AT&T	E5634B	Handset # 2	EW780-5348-01
3	iPod MP3 Player	Apple	iPod	5D612FSERS9	FCC EMC No. 2037

No.	Signal Cable Description for the above listed support Units.
1	N/A
2	N/A
3	2.5mm to 3.5mm Jack converter cable, 6” Long.

No.	Signal Cable Description for the EUT Ports.
1	None.

3.5 Test Equipment List:

No.	Equipment Description	Manufacturer	Model #	Serial #	Cal. Due	Remark
1	Spectrum Analyzer RF Section	HP	8566B	2607A02600	1/22/2008	RAD
2	Spectrum Analyzer Display Section	HP	85662A	2542A11375	1/22/2008	RAD
3	Pre-Amplifier	HP	8447D	2944A09373	6/22/2007	RAD
4	Quasi-Peak Adaptor	HP	85650A	2521A00671	01/17/2008	RAD
5	LISN	EMCO	3825/2	8902-1472	2/1/2008	N/A
6	LISN	FCC	FCC-LISN-50-25-2	9809	1/31/2008	N/A
7	Attenuator 50 ohm, 6 dB, DC-2 GHz	JFW	50F-006	GT # 1	6/22/2007	N/A
8	Bilogical Antenna	A.H. Systems	SAS-521-2	428	12/20/2007	RAD
9	Antenna Mast	Global Testing	GT-4MTR	GT # 1	CNR	RAD
10	Turntable	Mecbee	7211	GT-1	CNR	RAD

Note(s):

RAD= Radiated Emission Test
COND = Conducted Emission Test
BOTH = Radiated and Conducted Emissions Tests.
N/A = Not used.

4.0 Test Procedures:

4.1 General:

Radiated emission measurements were made of the Fundamental and Spurious Emission levels for the BlackJack Model BJ-1. Measurements of the occupied bandwidth were also made for the EUT.

Tests of the fundamental for the device were performed to determine the worst case polarization of the devices. The fundamental emissions of the device were measured with the antenna of the device in horizontal and vertical polarization.

The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a motorized turntable which allows 360 degree rotation. For measurements of the fundamental signal, a measurement antenna was positioned at a distance of 3 meters as measured from the closest point of the EUT. The radiated emissions were maximized by rotating the EUT and Antenna Scan Heights are varied from 1-4 meters to find the maximum radiated emissions.

A Spectrum Analyzer with peak detection was used to find the maximums of the radiated emissions during the testing. A drawing showing the test setup is given as Figure 1.

EMI test procedures are performed in accordance with the requirements of ANSI C63.4 (2003). Measurements are initially obtained using broad band antennas and PEAK detection.

4.2 Test EUT Operating Conditions:

a. Plug in the EUT into the AT&T Telephone Handset's 2.5mm Headset Jack and Turn on the power to EUT.
b. The Supporting Telephone Handsets were put in the Intercom mode for the continuously Communication mode.
c. The EUT was operated in continuous transmit mode at max power frequency modulated with a simulated voice to measure fundamental, harmonics and spurious radiation.

4.3 Radiated Emission Measurement Test Procedure:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the Turn table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz. When the reading margin is less than 3 dB, Quasi-Peak Reading were taken for that reading.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1GHz.

2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1 GHz. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the interference-receiving antenna.

4.4 Test Criteria:

The table below shows FCC radiated limits for an intentional radiator operating under the provisions of part 15.239. The measurement of the harmonics was performed to 1 GHz. The reference distance for each limit is also shown in this table.

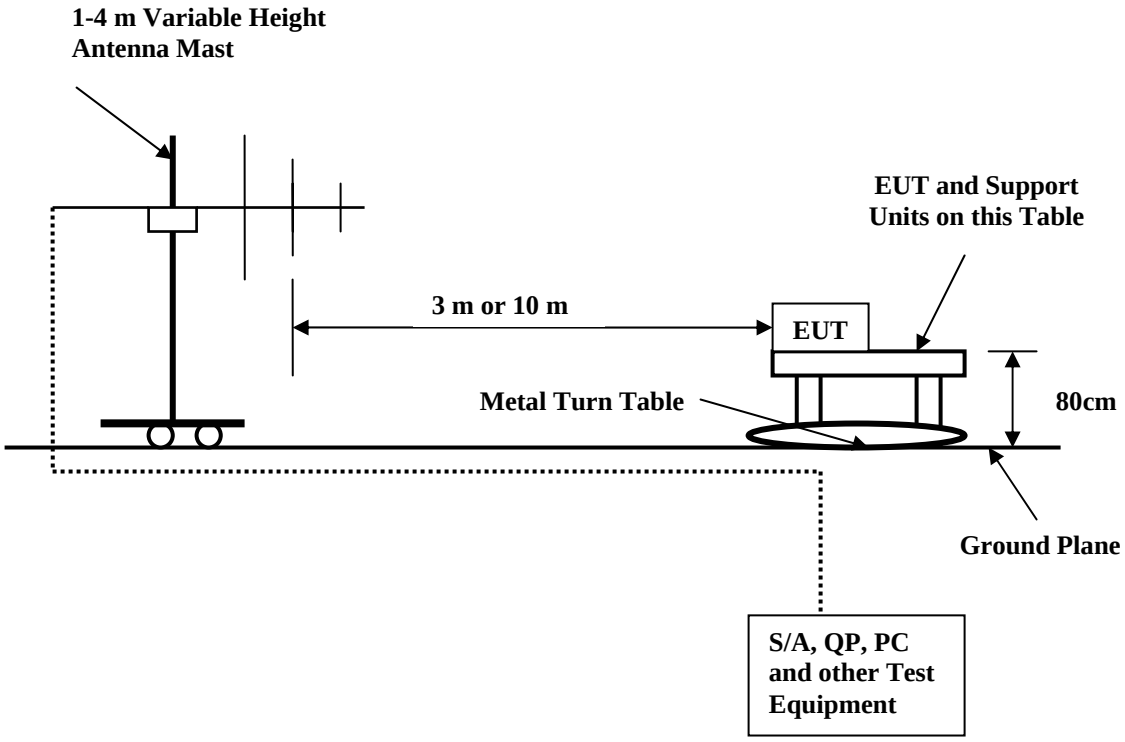
Frequency MHz	Test Distance Meters	Field Strength	
		uV/m at 3 meter	dBuV/m at Test Distance
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
960 to1000	3	500	54.0
Fundamental	3	250	48.0

Note: Fundamental and Harmonic Limits are expressed in Average field strengths. The spurious limits are expressed in Quasi-Peak.

4.5 Test Results:

The radiated test data for the fundamental is included in Appendix B. Peak detection was used during the test for the fundamental and harmonics. Quasi-Peak detection was used for spurious emissions below 1 GHz. The radiated Spurious Emission test data and plots are included in Appendix A. The radiated emissions generated by the BlackJack Model BJ-1 are below the FCC Part 15.239 limits.

Figure 1: Test Setup: Radiated Emissions Measurement



Note: **For actual test configuration, please refer to the Photographs of the Test Configuration.**

5.0 Occupied Bandwidth Measurements:

Measurements of the occupied bandwidth for the fundamental signals were made at Global Testing Open Area Test site at 1m distance to reduce the ambient interference.

5.1 Test Procedure:

The EUT was placed on a non-conductive table 0.8 meters above the floor. The table was rotated to an angle which presented the highest signal level. The occupied bandwidth was based on a 20 dB criteria (20 dB down either side of the emission from the peak emission). A drawing showing the test setup is given as Figure 1. **The occupied bandwidth measurement was performed while Apple iPod playing MP3 Song with volume control set to maximum Level.**

5.2 Test Criteria:

According to FCC Part 15.239, the bandwidth of the emission shall be less than 200 kHz.

5.3 Test Results:

The occupied bandwidth test data is included in Appendix A. **The maximum occupied bandwidth for the fundamental frequency 88.675 MHz is 107.5 kHz (See the Occupied Bandwidth Plot in Appendix C).** This occupied bandwidth complies with the FCC requirement.

6.0 Antenna Requirement:

An analysis of the BlackJack Model BJ-1 was performed to determine compliance with FCC Section 15.203. This section requires specific handling and control of antennas used for devices subject to regulations.

6.1 Evaluation Procedure:

The structure and application of the BlackJack Model BJ-1 was analyzed with respect to the rules. The antenna is permanently mounted on the PCB and no consideration of replacement. An auxiliary antenna port is not present.

6.2 Evaluation Criteria:

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

(a) Antenna must be permanently attached to the unit.
(b) Antenna must use a unique type of connector to attach to the EUT.
(c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

6.3 Evaluation Results:

The antenna is permanently mounted on the PCB and no consideration of replacement. The BlackJack Model BJ-1 meets the criteria of this rule by virtue of having an internal permanently mounted antenna. The EUT is therefore compliant.

7.0 Description of Measurement Facilities:

Global Testing 3 and 10 meter Open Area Test Sites (OATS) located at 4183 Riverview Drive, CA 92509, USA. For purpose of identification, the 3 and 10-meter test site will be referred to as Test Site A.

The test site is used to measure radio frequency emissions, radiated from electrical and electronic equipment. Specifically, the site is used for making measurements of equipment that are subject to equipment authorization under Parts 15 and 18 of the title 47 Code of Federal Regulations. The site is recognized by NVLAP to allow equipment to be authorized under the FCC's Declaration of Conformity process.

The test site has been evaluated and found to comply with the standard test site NSA requirements of ANSI C63.4-2003. The measurements where made in accordance with the procedures contained in Sections 5.4.6 through 5.5 of the ANSI C63.4-2003 specification as Standard Test Site (using Table 1 – Recommended geometrics for Broadband Antennas). The site attenuation measurements were performed on February 17-19, 2005.

The Open Area Test Site is located on an open, flat area that is clear of overhead wires and sufficiently large to allow testing at 3 and 10 meters. The site is situated at the west side of our Building, on the parking lot. The building is constructed of wood and stucco and is outside of the recommended ellipse. The closest point from the ground reference plane to the building is 21 feet. The closest point from the reference ground plan to fence is 13 feet.

The measurement instrumentation used during testing is located inside the building. There are two breakout boxes on the ground plane to which the antenna mast and turntable control lines are connected (for 3m and 10m). These control lines then run underground in conduit and terminate inside the building. The coax cable for the receive antenna is routed from back side of the antenna and then towards the measurement instrumentation located inside the building. The cable runs below the ground plane in a separate pipeline from control/power lines and terminate inside the building.

7.1 Capability:

Global Testing was founded in 1997 to provide our best service in Telecom, Safety and EMI/EMC Testing and Consultation. Global Testing's OATS meet the technical requirements for qualification testing of products to FCC Part 15, ICES-003, IEC/CISPR 22 & EN55022, AS/NZS CISPR 22, BSMI and other International Standards.

Global Testing also provides Telecom Testing services for the TIA-968-A-3 (FCC Part 68), Industry Canada CS-03, Japan JATE, India TEC and Safety Testing and Approval Services for the UL60950, CSA, TUV, AS/NZS 60950, CB Scheme, etc.

7.2 Accreditation / Approvals:

- **FCC Registered, NVLAP Accredited, Industry Canada Listed** (See Appendix G for Accreditation Certificates/Letters.

Appendix A

Radiated Emissions Test Data and Plots for Horizontal and Vertical Polarizations

Global Testing
4183 Riverview Drive
Riverside, CA 92509
(951)781-4540

Customer: Blackjack Handsfree, Inc.
Specification: FCC B RADIATED

FCC Part 15 Test Report: G04277A1

Work Order #:	Verbal	Date:	Fri Feb-16-2007
Test Type:	Radiated Scan	Time:	18:06:03
Equipment:	The Original BlackJack FM Radio Handsfree Device	Sequence:	1
Manufacturer:	BlackJack Handsfree, Inc.	Tested By:	Kumar Chaklashiya
Model:	BJ-1	FCC ID:	TBD
S/N:	Not Present		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model#	S/N	FCC ID
The Original BlackJack FM Radio Handsfree Device	BlackJack Handsfree, Inc.	BJ-1	Not Present	TBD

Support Devices:

Function	Manufacturer	Model#	S/N	FCC ID
Telephone Handset	AT&T	E5634B	Handset # 1	EW780-5348-01
Telephone Handset	AT&T	E5634B	Handset # 2	EW780-5348-01

Test Conditions / Notes:

Temp. 78F, Humidity 52%, EUT was Tested with AT&T Handset . The EUT was plug into the AT&T Handset 2.5mm Headset Jack. The AT&T Handset was continously communication with another AT&T Handset via Intercom function.

Transducer Legend:

T1=HP8447D-GT-73	T2=3m-site-CBL+ANT-CBL-2	T3=SAS-521-2-428-3M	

Measurement Data: Readings listed by frequency. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV Table	T1	T2	T3		Dist	Corr dBµV/m	Spec dBµV/m	Polar AntHt	Type	Margin
1	53.185	47.3	+27.8	+1.1	+7.6		+0.0	28.2	40.0	Horiz 200	Peak	**-11.8**
2	70.918	51.9 45	+27.7	+1.4	+7.1		+0.0	32.7	40.0	Horiz 200	Peak	**-7.3**
3	88.675	60.5 180	+27.8	+1.5	+10.5		+0.0	44.7	43.5	Horiz 200	Peak	**+1.2**
See FM Band Limit on the Plot, meets the FM Band Requirement.												
4	106.397	53.8 180	+27.6	+1.7	+14.3		+0.0	42.2	43.5	Horiz 200	Peak	**-1.3**
5	124.141	45.2 45	+27.6	+1.9	+16.5		+0.0	36.0	43.5	Horiz 200	Peak	**-7.5**
6	141.876	37.6 270	+27.5	+2.0	+17.2		+0.0	29.3	43.5	Horiz 200	Peak	**-14.2**
7	159.734	37.4 180	+27.4	+2.2	+17.1		+0.0	29.3	43.5	Horiz 200	Peak	**-14.2**
8	195.079	37.7 180	+27.2	+2.4	+13.1		+0.0	26.0	43.5	Horiz 200	Peak	**-17.5**
9	212.812	43.4 270	+27.2	+2.5	+12.0		+0.0	30.7	43.5	Horiz 200	Peak	**-12.8**
10	230.573	38.6 270	+27.2	+2.6	+12.2		+0.0	26.2	46.0	Horiz 200	Peak	**-19.8**
11	301.487	38.9 180	+27.1	+3.0	+13.7		+0.0	28.5	46.0	Horiz 200	Peak	**-17.5**

Global Testing
4183 Riverview Drive
Riverside, CA 92509
(951)781-4540

Customer: Blackjack Handsfree, Inc.
Specification: FCC B RADIATED

FCC Part 15 Test Report: G04277A1

Work Order #:	Verbal	Date:	Mon Feb-19-2007
Test Type:	Radiated Scan	Time:	15:54:10
Equipment:	The Original BlackJack FM Radio Handsfree Device	Sequence:	1
Manufacturer:	BlackJack Handsfree, Inc.	Tested By:	Kumar Chaklashiya
Model:	BJ-1	FCC ID:	TBD
S/N:	Not Present		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model#	S/N	FCC ID
The Original BlackJack FMRadio Handsfree Device	BlackJack Handsfree, Inc.	BJ-1	N/P	N/P

Support Devices:

Function	Manufacturer	Model#	S/N	FCC ID
Telephone Handset	AT&T	E5634B	Handset # 2	EW780-5348-01
Telephone Handset	AT&T	E5634B	Handset # 1	EW780-5348-01

Test Conditions / Notes:

Temp. 74F, Humidity 52%, EUT was Tested with AT&T Handset . The EUT was plug into the AT&T Handset 2.5mm Headset Jack. The AT&T Handset was continously communication with another AT&T Handset via Intercom function.

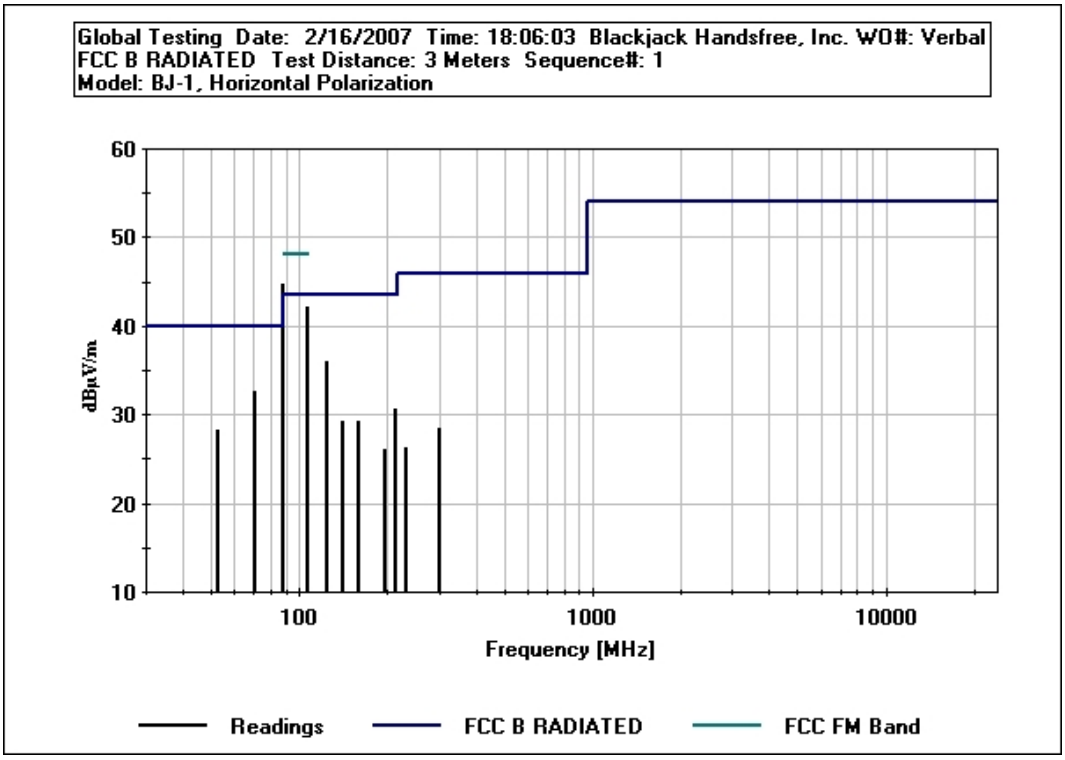
Transducer Legend:

T1=HP8447D-GT-73	T2=3m-site-CBL+ANT-CBL-2	T3=SAS-521-2-428-3M	

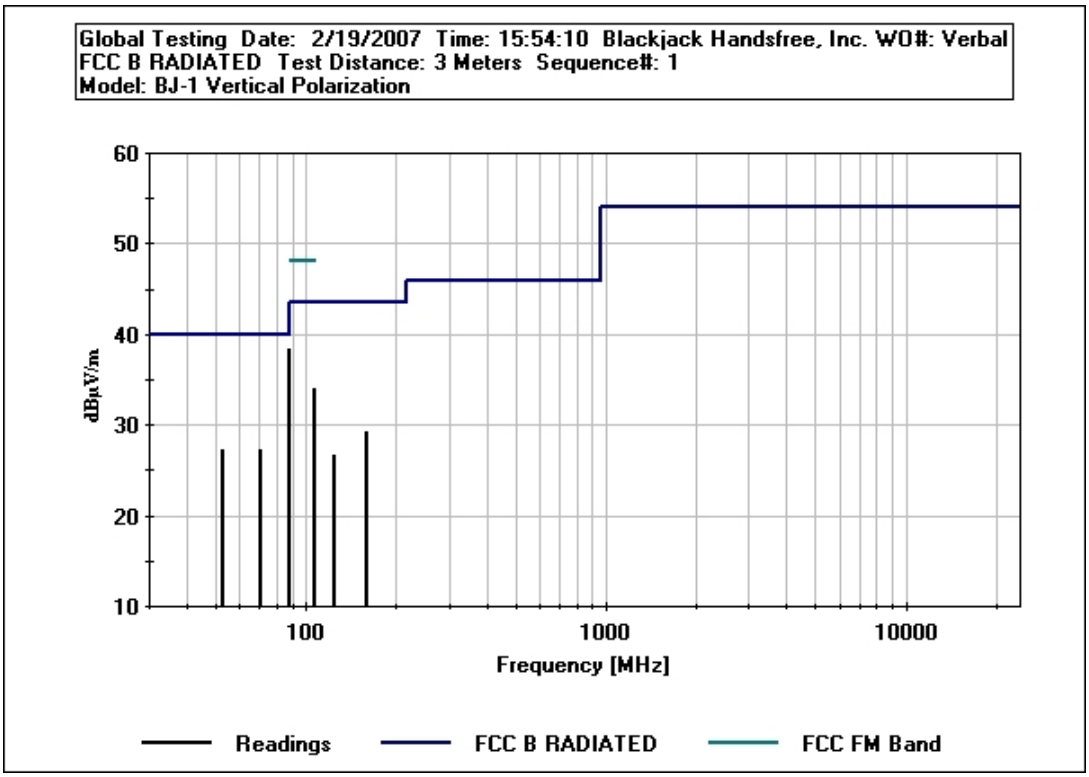
Measurement Data: Readings listed by frequency. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV Table	T1	T2	T3		Dist	Corr dBµV/m	Spec dBµV/m	Polar AntHt	Type	Margin
1	53.187	46.3	+27.8	+1.1	+7.6		+0.0	27.2	40.0	Vert 100	Peak	**-12.8**
2	70.922	46.4	+27.7	+1.4	+7.1		+0.0	27.2	40.0	Vert 100	Peak	**-12.8**
3	88.672	54.2 90	+27.8	+1.5	+10.5		+0.0	38.4	43.5	Vert 100	Peak	**-5.1**
4	106.398	45.7 90	+27.6	+1.7	+14.3		+0.0	34.1	43.5	Vert 100	Peak	**-9.4**
5	124.150	35.9 90	+27.6	+1.9	+16.5		+0.0	26.7	43.5	Vert 100	Peak	**-16.8**
6	159.716	37.4 180	+27.4	+2.2	+17.1		+0.0	29.3	43.5	Vert 100	Peak	**-14.2**

Radiated Emissions Test Data Plot for Horizontal Polarization



Radiated Emissions Test Data Plot for Vertical Polarization



Appendix B

Fundamental Frequency
Radiated Emissions Test Data and Plots for
Horizontal and Vertical Polarizations

Global Testing
4183 Riverview Drive
Riverside, CA 92509
(951)781-4540

Customer: Blackjack Handsfree, Inc.
Specification: FCC FM Band

FCC Part 15 Test Report: G04277A1

Work Order #:	Verbal	Date:	Fri Feb-16-2007
Test Type:	Radiated Scan	Time:	18:06:03
Equipment:	The Original BlackJack FM Radio Handsfree Device	Sequence:	1
Manufacturer:	BlackJack Handsfree, Inc.	Tested By:	Kumar Chaklashiya
Model:	BJ-1	FCC ID:	TBD
S/N:	Not Present		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model#	S/N	FCC ID
The Original BlackJack FM Radio Handsfree Device	BlackJack Handsfree, Inc.	BJ-1	Not Present	TBD

Support Devices:

Function	Manufacturer	Model#	S/N	FCC ID
Telephone Handset	AT&T	E5634B	Handset # 1	EW780-5348-01
Telephone Handset	AT&T	E5634B	Handset # 2	EW780-5348-01

Test Conditions / Notes:

Temp. 78F, Humidity 52%, EUT was Tested with AT&T Handset . The EUT was plug into the AT&T Handset 2.5mm Headset Jack. The AT&T Handset was continously communication with another AT&T Handset via Intercom function.

Transducer Legend:

T1=HP8447D-GT-73	T2=3m-site-CBL+ANT-CBL-2	T3=SAS-521-2-428-3M	

Measurement Data: Readings listed by frequency. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV Table	T1	T2	T3		Dist	Corr dBµV/m	Spec dBµV/m	Polar AntHt	Type	Margin
1	88.675	60.5 180	+27.8	+1.5	+10.5		+0.0	44.7	48.0	Horiz 200	Peak	**-3.3**

Global Testing
4183 Riverview Drive
Riverside, CA 92509
(951)781-4540

Customer: Blackjack Handsfree, Inc.
Specification: FCC FM Band

FCC Part 15 Test Report: G04277A1

Work Order #:	Verbal	Date:	Mon Feb-19-2007
Test Type:	Radiated Scan	Time:	15:54:10
Equipment:	The Original BlackJack FM Radio Handsfree Device	Sequence:	1
Manufacturer:	BlackJack Handsfree, Inc.	Tested By:	Kumar Chaklashiya
Model:	BJ-1	FCC ID:	TBD
S/N:	Not Present		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model#	S/N	FCC ID
The Original BlackJack FMRadio Handsfree Device	BlackJack Handsfree, Inc.	BJ-1	N/P	N/P

Support Devices:

Function	Manufacturer	Model#	S/N	FCC ID
Telephone Handset	AT&T	E5634B	Handset # 2	EW780-5348-01
Telephone Handset	AT&T	E5634B	Handset # 1	EW780-5348-01

Test Conditions / Notes:

Temp. 74F, Humidity 52%, EUT was Tested with AT&T Handset . The EUT was plug into the AT&T Handset 2.5mm Headset Jack. The AT&T Handset was continously communication with another AT&T Handset via Intercom function.

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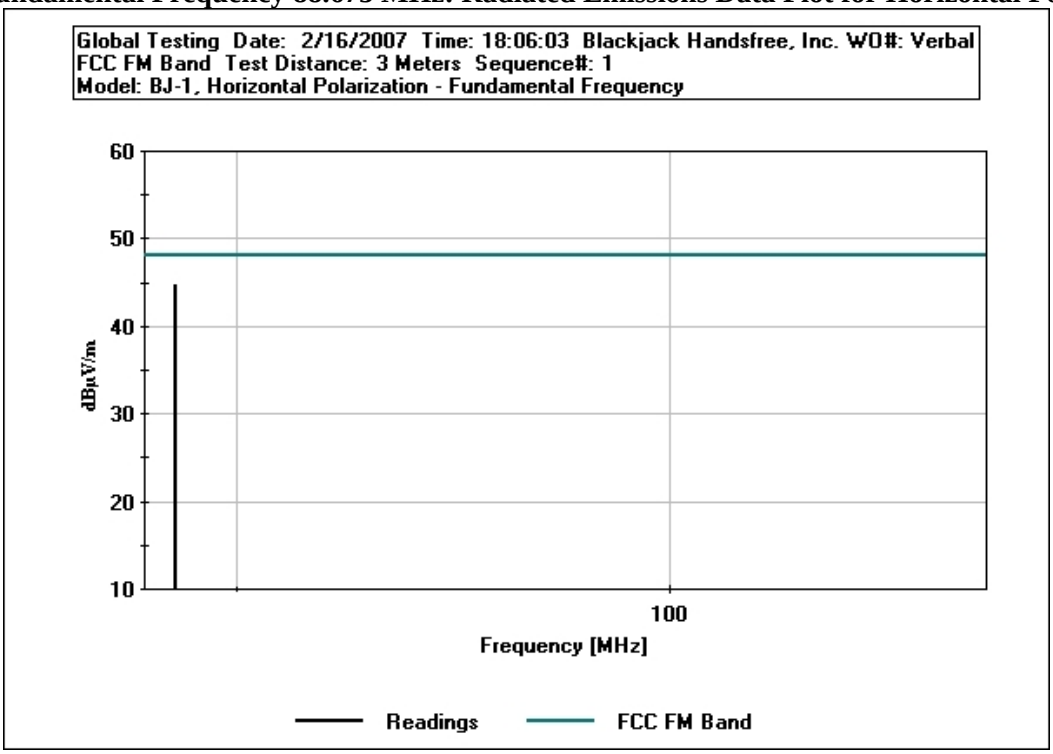
T1=HP8447D-GT-73	T2=3m-site-CBL+ANT-CBL-2	T3=SAS-521-2-428-3M	

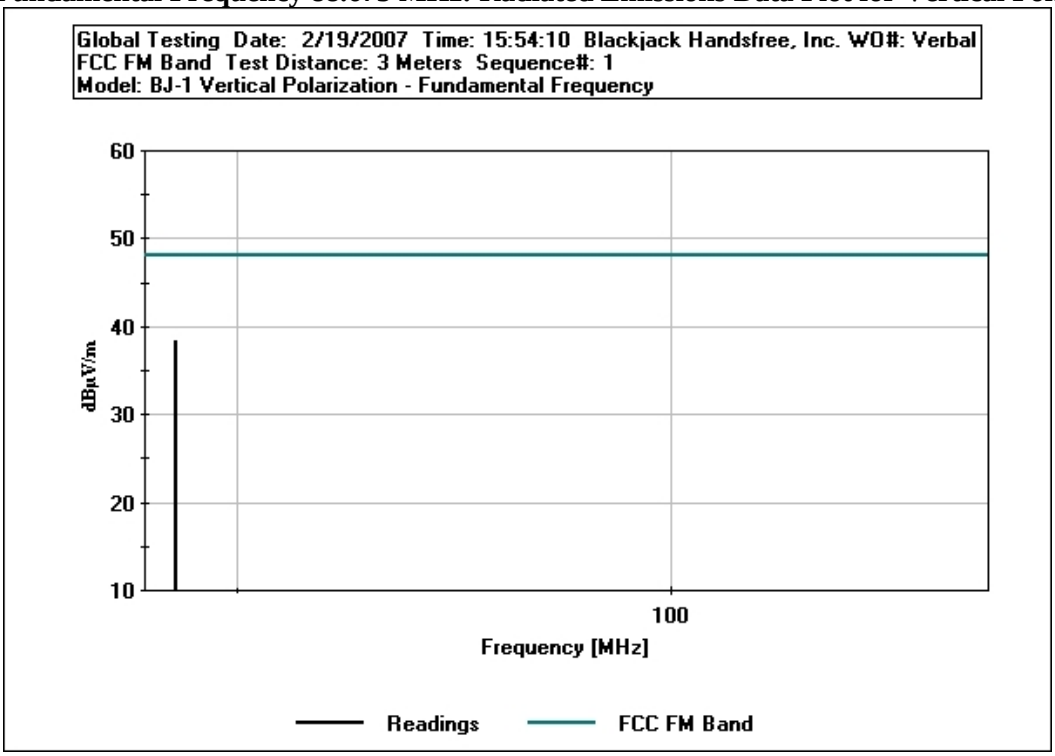
Measurement Data: Readings listed by frequency. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV Table	T1	T2	T3		Dist	Corr dBµV/m	Spec dBµV/m	Polar AntHt	Type	Margin
1	88.672	54.2 90	+27.8	+1.5	+10.5		+0.0	38.4	48.0	Vert 100	Peak	**-9.6**

Fundamental Frequency 88.675 MHz: Radiated Emissions Data Plot for Horizontal Pol.

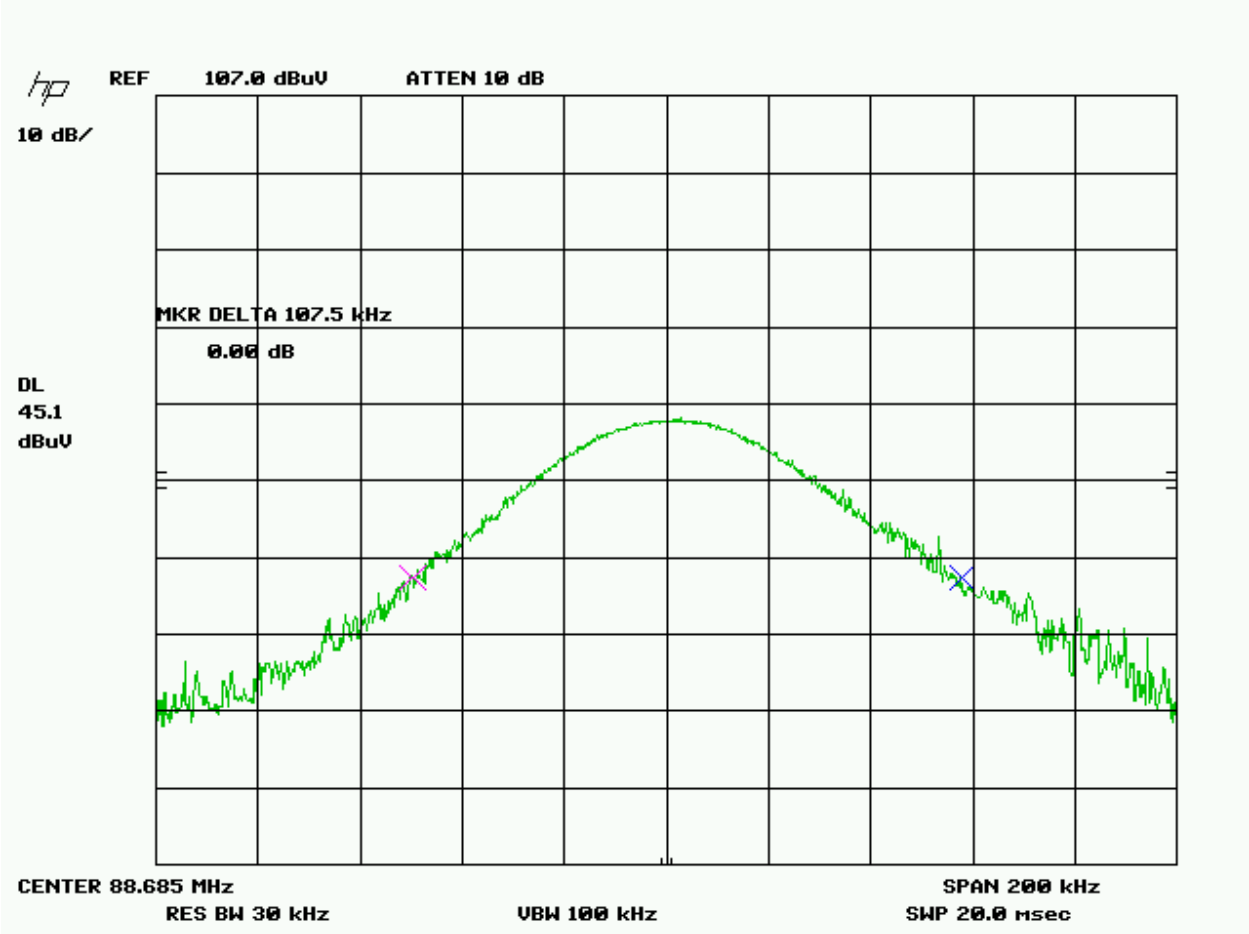


Fundamental Frequency 88.675 MHz: Radiated Emissions Data Plot for Vertical Pol.



Appendix C

Occupied Bandwidth Test Data Plot
BlackJack Model: BJ-1
For Fundamental Frequency 88.675 MHz



Limit: 200 kHz Maximum.
Reading: 107.5 kHz
Result: Pass

Note: The occupied bandwidth measurement was performed while Apple iPod playing MP3 Song with volume control set to maximum Level. The BlackJack Model BJ-1 does not have Tuning control function for the user.

Appendix D

Radiated Emissions Test setup Photos

For Vertical Polarization

For Horizontal Polarization

Appendix E
User's Instructions and Labeling Requirements

Section 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Section 15.105 Information to the user.

(a) For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual: NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Section 15.19 Labeling requirements.

(a) In addition to the requirements in Part 2 of this Chapter, a device subject to certification or verification shall be labelled as follows:

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under Part 73, land mobile operation under Part 90, etc., shall bear the following statement in a conspicuous location on the device: This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device: This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) **When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.**

Appendix F
Test Facility Approval Certificates/Letters

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:1999

NVLAP LAB CODE: 200436-0

Global Testing
Riverside, CA

is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

2007-04-01 through 2008-03-31
Effective dates

Sally S. Bruce
For the National Institute of Standards and Technology

NVLAP-01C (REV. 2005-05-19)

4183 Riverview Dr., Riverside, CA 92509, USA Phone: (951)781-4540 Fax: (951)781-4544

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:1999

Global Testing
4183 Riverview Drive
Riverside, CA 92509-6616
Mr. Kumar Chaklashiya
Phone: 951-781-4540 Fax: 951-781-4544
E-Mail: kumar@global-testing.com
URL: http://www.global-testing.com

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS **NVLAP LAB CODE 200436-0**

NVLAP Code	*Designation / Description*
Emissions Test Methods:	
12/CIS22	IEC/CISPR 22 (1997) & EN 55022 (1998) + A1(2000): Limits and methods of measurement of radio disturbance characteristics of information technology equipment
12/CIS22a	IEC/CISPR 22 (1993) and EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1 (1995) and Amendment 2 (1996)
12/CIS22b	CNS 13438 (1997): Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
12/FCC15b	ANSI C63.4 (2003) with FCC Method 47 CFR Part 15, Subpart B: Unintentional Radiators
12/T51a	AS/NZS CISPR 22 (2004): Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
Product Safety Test Methods	
12/4117	AS/NZS 4117 (1999): Surge protective devices for telecommunications applications
12/T41	AC/ACIF S001 (2001): Safety Requirements for Customer Equipment

2007-04-01 through 2008-03-31
Effective dates

Sally S. Bruce
For the National Institute of Standards and Technology

NVLAP® National Voluntary Laboratory Accreditation Program

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200436-0

NVLAP Code	*Designation / Description*
12/T41e	EN 60950-1, IEC 60950-1 & UL 60950-1 (1st edition): (2001): Information technology equipment - Safety - Part 1: General requirements
12/T41f	ANSI/UL 60950-1 (2003) and CAN/CSA 22.2 No. 60950-1: Safety of Information Technology Equipment
12/T50a	AS/NZ 60950 (2000): Safety of information technology equipment
12/T50b	AS/NZS 60950.1 (2003): Information technology equipment - Safety - Part 1: General requirements (IEC 60950-1: 2001, MOD)
12/T50c	AS/NZS 60950.1 (2006):
RF Exposure Test Methods (SAR & MPE)	
12/T41a	AS/NZS 60950 (2000): Safety of Information Technology Equipment (including Amdt1)
Telecommunications Test Methods:	
12/CS03a	Industry Canada CS-03, Issue 9, Amendment 1 (2005): Compliance Specification for Terminal Equipment, Terminal Systems, Network Protection Devices, Connection Arrangements and Hearing Aids Compatibility
12/T01	Terminal Equipment Network Protection Standards, FCC/ACTA Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 and 68.317 Hearing Aid Compatibility: technical standards
12/T42	AS/ACIF S002 (2001) + Amendment 1: Analogue Interworking and Non-Interference Requirements for Customer Equipment Connected to the Public Switched Telephone Network

2007-04-01 through 2008-03-31

Effective dates

Sally S. Bruce

For the National Institute of Standards and Technology

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NVLAP-01S (REV. 2005-05-19)

NVLAP® National Voluntary Laboratory Accreditation Program

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200436-0

NVLAP Code	*Designation / Description*
12/T43	AS/ACIF S003:2001: Customer Switching Systems Connected to the Public Switched Telephone Network
12/T44	AS/ACIF S004 (2004): Voice Frequency Performance Requirements for Customer Equipment
12/T45	AS/ACIF S006 (2001): Requirements for Customer Equipment, operating in the voiceband, for connection to the non-switched Telecommunications Network
12/T46	AS/ACIF S008 (2001): Requirements for Authorised Cabling Products
12/T47	ACA TS-013: General Requirements for Customer Equipment Connected to ISDN Basic Access
12/T48	ACA TS-014: General Requirements for Customer Equipment Connected to ISDN Primary Rate Access
12/T49	AS/ACIF S016 (2001): Requirements for Customer Equipment for connection to hierarchical digital interfaces
12/TIA968	ANSI/TIA-968-A (2003): Telephone Terminal Equipment, Technical Requirements for Connection of Terminal Equipment to the Telephone Network
12/TIA968a	ANSI/TIA-968-A-1 (2003): Telephone Terminal Equipment, Technical Requirements for Connection of Terminal Equipment to the Telephone Network - Addendum 1
12/TIA968b	ANSI/TIA-968-A-2 (2004): Telephone Terminal Equipment, Technical Requirements for Connection of Terminal Equipment to the Telephone Network - Addendum 2
12/TIA968c	ANSI/TIA-968-A-3 (2005): Telephone Terminal Equipment, Technical Requirements for Connection of Terminal Equipment to the Telephone Network - Addendum 3

2007-04-01 through 2008-03-31
Effective dates

Sally S. Bruce
For the National Institute of Standards and Technology

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NVLAP-01S (REV. 2005-05-19)

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

March 28, 2005

Registration Number: 780471

Global Testing
4183 Riverview Drive
Riverside, CA 92509

Attention: Kumar Chaklashiya

Re: Measurement facility located at Riverside
3 & 10 meter OATS
Date of Listing: March 28, 2005

Dear Sir or Madam:

Your request for registration of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC rules. The information has, therefore, been placed on file and the name of your organization added to the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,

Thomas Phillips
Electronics Engineer

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

June 07, 2005

Global Testing, A Div. of Rajkumar Corp.
4183 Riverview Drive
Riverside, CA 925096616

Attention: Kumar Chaklashiya

Re: Accreditation of Global Testing, A Div. of Rajkumar Corp.

Dear Sir or Madam:

We have been notified by National Voluntary Laboratory Accreditation Program that Global Testing, A Div. of Rajkumar Corp. has been accredited as a Conformity Assessment Body (CAB).

At this time your organization is hereby designated to perform compliance testing on equipment subject to Declaration Of Conformity (DOC) and Certification under Parts 15 and 18 of the Commission's Rules.

This designation will expire upon expiration of the accreditation or notification of withdrawal of designation.

Sincerely,

Thomas Phillips
Electronics Engineer

March 4th, 2005

Our File: 46405-2916
Submission: 105646

Mr. Kumar Chaklashiya
Global Testing
4183 Riverview Dr.
Riverside
CA, USA
92509

Dear Mr. Chaklashiya,

The Bureau has received your test report for a 3m and 10m Open Area Test Site located in Riverside, CA, USA. I have reviewed the report and find it complies with RSS 212, Issue 1 (Provisional).

The site is acceptable to Industry Canada for the performance of radiated measurements.

Please reference the file number **(IC 2916)** in the body of all test reports containing measurements made on this site.

This reference number is the indication to the Industry Canada Certification Officers that the site meets the requirements of RSS 212, Issue 1 (Provisional). Your company has been added to our published list of filed sites on the Bureau's web page. Please keep the contact information current by notifying us if it changes or is in error.

Keep informed of the latest Industry Canada regulations by visiting the Bureau's site on the World Wide Web:

http://strategis.ic.gc.ca/epic/internet/inceb-bhst.nsf/en/Home

Whenever major construction or repairs to the site are completed, a re-submission of the site attenuation characteristics will be required, or every three years.

Yours sincerely,

Stéphane Proulx
for Wireless Laboratory Manager
Certification and Engineering Bureau
3701 Carling Ave., Building 94
P.O. Box 11490, Station "H"
Ottawa, Ontario
K2H 8S2
Tel. No. (613) 990-3796
Fax. No. (613) 990-4752

Company Printable Page

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Industry Canada Industrie Canada

GLOBAL TESTING

Sites on File:

Filing #	OATS 3m	OATS 10m	OATS 30m	Chamber 3m	Chamber 10m	Expiry Date
2916	Y	Y	N	N	N	2008-03-04

<< Return to Previous Page

Canada

Updated: 2005-03-09

http://strategis.ic.gc.ca/sitt/testFacilities/launchScope.do;jsessionid=0000YwUY9E2eJ-rk1L... 3/9/2005