

# Spectrum Technology

## IX600-MC8765

July 21, 2006

Report No. SPTE0026.1

Report Prepared By



[www.nwemc.com](http://www.nwemc.com)

1-888-EMI-CERT

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EMC Test Report



22975 NW Evergreen Parkway  
Suite 400  
Hillsboro, Oregon 97124

**Certificate of Test**  
Issue Date: July 21, 2006  
Spectrum Technology  
Model: IX600-MC8765

Emissions				
Test Description	Specification	Test Method	Pass	Fail
Radiated Emissions	FCC 15.109(a) Class B:2005-10	ANSI C63.4:2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conducted Emissions	FCC 15.107 Class B:2005-10	ANSI C63.4:2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Modifications made to the product**  
See the Modifications section of this report

**Approved By:**

Greg Kiemel, Director of Engineering

*This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.*

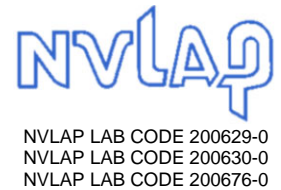
*Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested, the specific description is noted in each of the individual sections of the test report supporting this certificate of test.*

Revision Number	Description	Date	Page Number
00	None		

**FCC:** Accredited by NVLAP for performance of FCC radio, digital, and ISM device testing. Our Open Area Test Sites, certification chambers, and conducted measurement facilities have been fully described in reports filed with the FCC and accepted by the FCC in letters maintained in our files. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by the FCC as a Telecommunications Certification Body (TCB). This allows Northwest EMC to certify transmitters to FCC specifications in accordance with 47 CFR 2.960 and 2.962.



**NVLAP:** Northwest EMC, Inc. is accredited under the United States Department of Commerce, National Institute of Standards and Technology, and National Voluntary Laboratory Accreditation Program for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. The NVLAP accreditation encompasses Electromagnetic Compatibility Testing in accordance with the European Union EMC Directive 89/336/EEC, ANSI C63.4, MIL-STD 461E, DO-160D and SAE J1113. Additionally, Northwest EMC is accredited by NVLAP to perform radio testing in accordance with the European Union R&TTE Directive 1999/5/EEC, the requirements of FCC, and the RSS radio standards for Industry Canada.



**Industry Canada:** Accredited by NVLAP for performance of Industry Canada RSS and ICES testing. Our Open Area Test Sites and certification chambers comply with RSS 212, Issue 1 (Provisional) and have been filed with Industry Canada and accepted. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by NIST and recognized by Industry Canada as a Certification Body (CB) per the APEC Mutual Recognition Arrangement (MRA). This allows Northwest EMC to certify transmitters to Industry Canada technical requirements.



**CAB:** Designated by NIST and validated by the European Commission as a Conformity Assessment Body (CAB) to conduct tests and approve products to the EMC directive and transmitters to the R&TTE directive, as described in the U.S. - EU Mutual Recognition Agreement.



**TÜV Product Service:** Included in TÜV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TÜV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TÜV's current Listing of CARAT Laboratories, available from TÜV. A certificate was issued to represent that this laboratory continues to meet TÜV's CARAT Program requirements. Certificate No. USA0401C.



**TÜV Rheinland:** Authorized to carryout EMC tests by order and under supervision of TÜV Rheinland. This authorization is based on "Conditions for EMC-Subcontractors" of November 1992.



**NEMKO:** Assessed and accredited by NEMKO (Norwegian testing and certification body) for European emissions and immunity testing. As a result of NEMKO's laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification (Authorization No. ELA 119).



**Australia/New Zealand:** The National Association of Testing Authorities (NATA), Australia has been appointed by the ACA as an accreditation body to accredit test laboratories and competent bodies for EMC standards. Accredited test reports or assessments by competent bodies must carry the NATA logo. Test reports made by an overseas laboratory that has been accredited for the relevant standards by an overseas accreditation body that has a Mutual Recognition Agreement (MRA) with NATA are also accepted as technical grounds for product conformity. The report should be endorsed with the respective logo of the accreditation body (NVLAP).



**VCCI:** Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. (*Registration Numbers. - Hillsboro: C-1071, R-1025, and R-2318, Irvine: C-2094 and R-1943, Sultan: R-871, C-1784 and R-1761.*)



**BSMI:** Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement. License No.SL2-IN-E-1017.



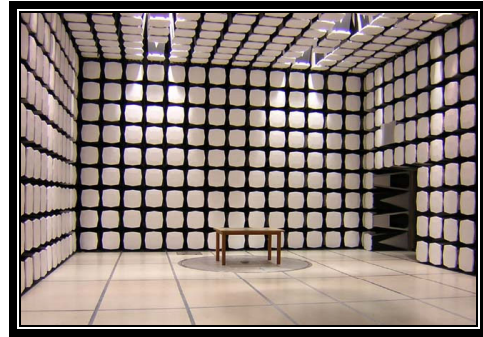
**GOST:** Northwest EMC, Inc. has been assessed and accredited by the Russian Certification bodies Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC, to perform EMC and Hygienic testing for Information Technology Products. As a result of their laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification



## SCOPE

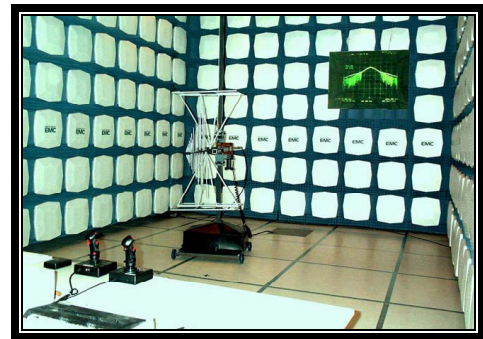
For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/scope.asp>



**California – Orange County Facility  
Labs OC01 – OC13**

41 Tesla Ave. Irvine, CA 92618  
(888) 364-2378 Fax: (503) 844-3826



**Oregon – Evergreen Facility  
Labs EV01 – EV11**

22975 NW Evergreen Pkwy. Suite 400 Hillsboro, OR 97124  
(503) 844-4066 Fax: (503) 844-3826



**Washington – Sultan Facility  
Labs SU01 – SU07**

14128 339<sup>th</sup> Ave. SE Sultan, WA 98294  
(888) 364-2378

**Party Requesting the Test**

<b>Company Name:</b>	Spectrum Technology, Inc.
<b>Address:</b>	209 Dayton Street Suite #205
<b>City, State, Zip:</b>	Edmonds, WA 98020
<b>Test Requested By:</b>	Rod Munro
<b>Model:</b>	IX600-MC8765
<b>First Date of Test:</b>	June 06, 2006
<b>Last Date of Test:</b>	June 16, 2006
<b>Receipt Date of Samples:</b>	May 30, 2006
<b>Equipment Design Stage:</b>	Production
<b>Equipment Condition:</b>	No visual damage.

**Information Provided by the Party Requesting the Test****Functional Description of the EUT (Equipment Under Test):**

GSM/GPRS radio installed in an Itronix notebook computer.

**Client Justification for Test Selection:**

These tests are required to demonstrate compliance with FCC 15B requirements for the digital portion of the GSM/GPRS radio while configured in the Itronix IX600 notebook computer.

**CONFIGURATION 3 SPTE0026****Software/Firmware Running during test**

Description	Version
Procomm Plus Terminal	4.8 Build 71

**EUT**

Description	Manufacturer	Model/Part Number	Serial Number
EUT	Itronix, Corp.	IX600-MC8765	35922600004984

**Peripherals in test setup boundary**

Description	Manufacturer	Model/Part Number	Serial Number
Internal Antenna	Skycross	59-0479-001	Unknown
Host IX600 Notebook PC	Itronix, Corp.	IX-600	None
Host IX600 Notebook PC	Itronix, Corp.	IX-600	ZZGEG6072ZZ5515
AC Adapter	Delta Electronics	SADP-65KB D	92W0540003980
AC Adapter	Delta Electronics	SADP-65KB D	92W0540003970
CF Card Reader	Itronix, Corp.	SDDR-91	None
Mouse	Logitech	M-BE58	LZE02357693
Headphones	Unknown	None	None

**Cables**

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	1.8m	No	AC Adapter	AC Mains
USB	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated
USB	Yes	1.0m	No	Host IX600 Notebook PC	CF Card Reader
Serial	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated
Ethernet	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated
Modem	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated
Microphone	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated
Speaker	Yes	1.0m	No	Host IX600 Notebook PC	Headphones
VGA	Yes	1.0m	No	Host IX600 Notebook PC	Unterminated

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.



<b>Equipment modifications</b>					
Item	Date	Test	Modification	Note	Disposition of EUT
1	6/6/2006	Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	6/16/2006	Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

**MODES OF OPERATION**

Receive mode GSM Cellular band

**POWER SETTINGS INVESTIGATED**

120VAC/60Hz

**FREQUENCY RANGE INVESTIGATED**

Start Frequency	30 MHz	Stop Frequency	5 GHz
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**CLOCKS AND OSCILLATORS**

Unknown

**SAMPLE CALCULATIONS**

$$\text{Radiated Emissions: Field Strength} = \text{Measured Level} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain} + \text{Distance Adjustment Factor} + \text{External Attenuation}$$
**TEST EQUIPMENT**

Description	Manufacturer	Model	ID	Last Cal.	Interval
Pre-Amplifier	Miteq	AMF-4D-010100-24-10P	APW	8/2/2005	13
Pre-Amplifier	Miteq	AM-1616-1000	AOL	1/4/2006	13
Antenna, Biconilog	EMCO	3141	AXE	12/28/2005	24
Antenna, Horn	EMCO	3115	AHC	8/30/2005	12
Spectrum Analyzer	Agilent	E4446A	AAT	4/4/2006	12

**MEASUREMENT BANDWIDTHS**

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

**MEASUREMENT UNCERTAINTY**

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

**TEST DESCRIPTION**

Using the mode of operation and configuration noted within this report, a final radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Radiated emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level will be detected. This requires the use of a turntable and an antenna positioner. The preferred method of a continuous azimuth search is utilized for frequency scans of the EUT field strength with both polarities of the measuring antenna. A calibrated, linearly polarized antenna was positioned at the specified distance from the periphery of the EUT.

Tests were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna was varied in height above the conducting ground plane to obtain the maximum signal strength. Though specified in the report, the measurement distance shall be 3 meters or 10 meters. At any measurement distance, the antenna height was varied from 1 meter to 4 meters. These height scans apply for both horizontal and vertical polarization, except that for vertical polarization the minimum height of the center of the antenna shall be increased so that the lowest point of the bottom of the antenna clears the ground surface by at least 25 cm.

EUT: IX600-MC8765	Work Order: SPTE0026
Serial Number: 35922600004984	Date: 06/16/06
Customer: Spectrum Technology	Temperature: 23
Attendees: None	Humidity: 41%
Project: None	Barometric Pres.: 29.98
Tested by: Holly Ashkannejhad	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS		Test Method
FCC 15.109(a) Class B:2005-10		ANSI C63.4:2003

TEST PARAMETERS		
Antenna Height(s) (m)	1 - 4	Test Distance (m)
		3

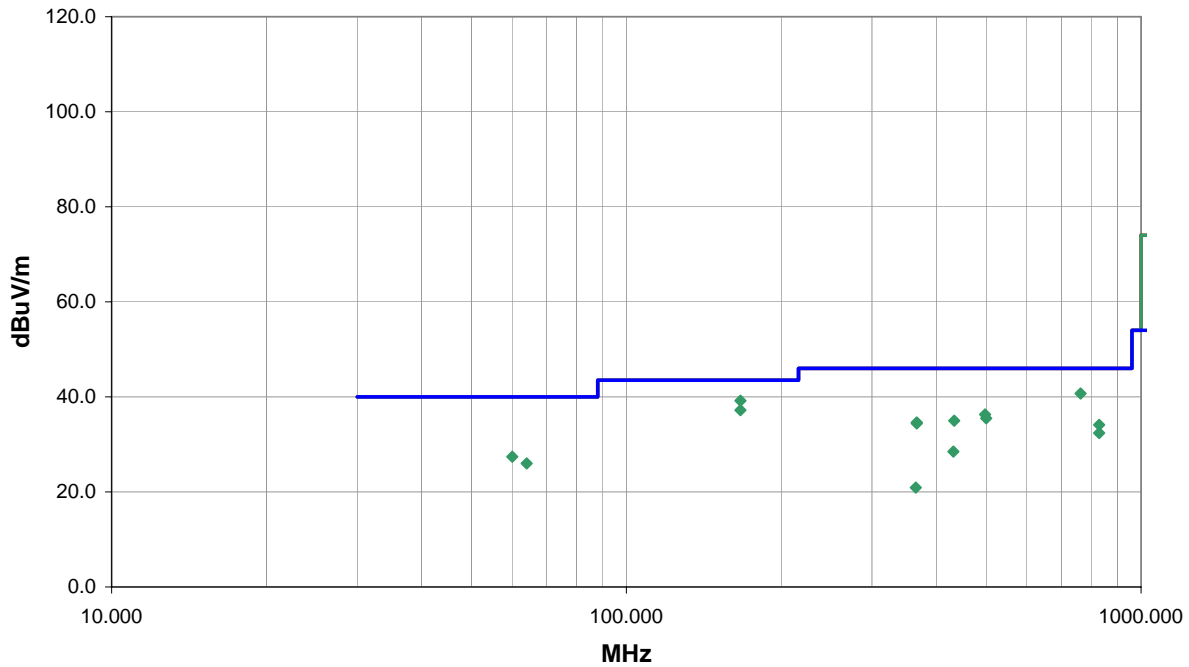
**COMMENTS**  
Internal antenna. Notebook configuration.

**EUT OPERATING MODES**  
Receive mode GSM Cellular band

**DEVIATIONS FROM TEST STANDARD**  
No deviations.

Run #	37	Signature <i>Holly Ashkannejhad</i>
Configuration #	3	
Results	Pass	

NVLAP Lab Code 200630-0



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
166.639	44.4	-5.2	338.0	1.7	3.0	0.0	H-Bilog	QP	0.0	39.2	43.5	-4.3
762.967	31.4	9.3	149.0	1.2	3.0	0.0	V-Bilog	QP	0.0	40.7	46.0	-5.3
166.639	42.4	-5.2	172.0	1.0	3.0	0.0	V-Bilog	QP	0.0	37.2	43.5	-6.3
497.616	31.5	4.8	305.0	1.7	3.0	0.0	H-Bilog	QP	0.0	36.3	46.0	-9.7
500.006	30.7	4.8	56.0	1.0	3.0	0.0	V-Bilog	QP	0.0	35.5	46.0	-10.5
433.324	31.4	3.6	210.0	1.0	3.0	0.0	H-Bilog	QP	0.0	35.0	46.0	-11.0
366.657	32.4	2.2	31.0	1.7	3.0	0.0	V-Bilog	QP	0.0	34.6	46.0	-11.4
366.649	32.2	2.2	22.0	1.5	3.0	0.0	V-Bilog	QP	0.0	34.4	46.0	-11.6
829.293	23.9	10.2	95.0	1.9	3.0	0.0	V-Bilog	QP	0.0	34.1	46.0	-11.9
60.018	33.8	-6.4	360.0	3.1	3.0	0.0	V-Bilog	QP	0.0	27.4	40.0	-12.6
829.292	22.2	10.2	237.0	1.0	3.0	0.0	H-Bilog	QP	0.0	32.4	46.0	-13.6
64.010	32.8	-6.8	301.0	3.3	3.0	0.0	V-Bilog	QP	0.0	26.0	40.0	-14.0
432.021	24.9	3.6	226.0	1.5	3.0	0.0	V-Bilog	QP	0.0	28.5	46.0	-17.5
364.942	18.8	2.1	2.0	3.4	3.0	0.0	H-Bilog	QP	0.0	20.9	46.0	-25.1

EUT: IX600-MC8765	Work Order: SPTE0026
Serial Number: 35922600004984	Date: 06/16/06
Customer: Spectrum Technology	Temperature: 23
Attendees: None	Humidity: 41%
Project: None	Barometric Pres.: 29.98
Tested by: Holly Ashkannejhad	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS		Test Method
FCC 15.209(a):2005-9		ANSI C63.4:2003

TEST PARAMETERS		
Antenna Height(s) (m)	1 - 4	Test Distance (m)
		3

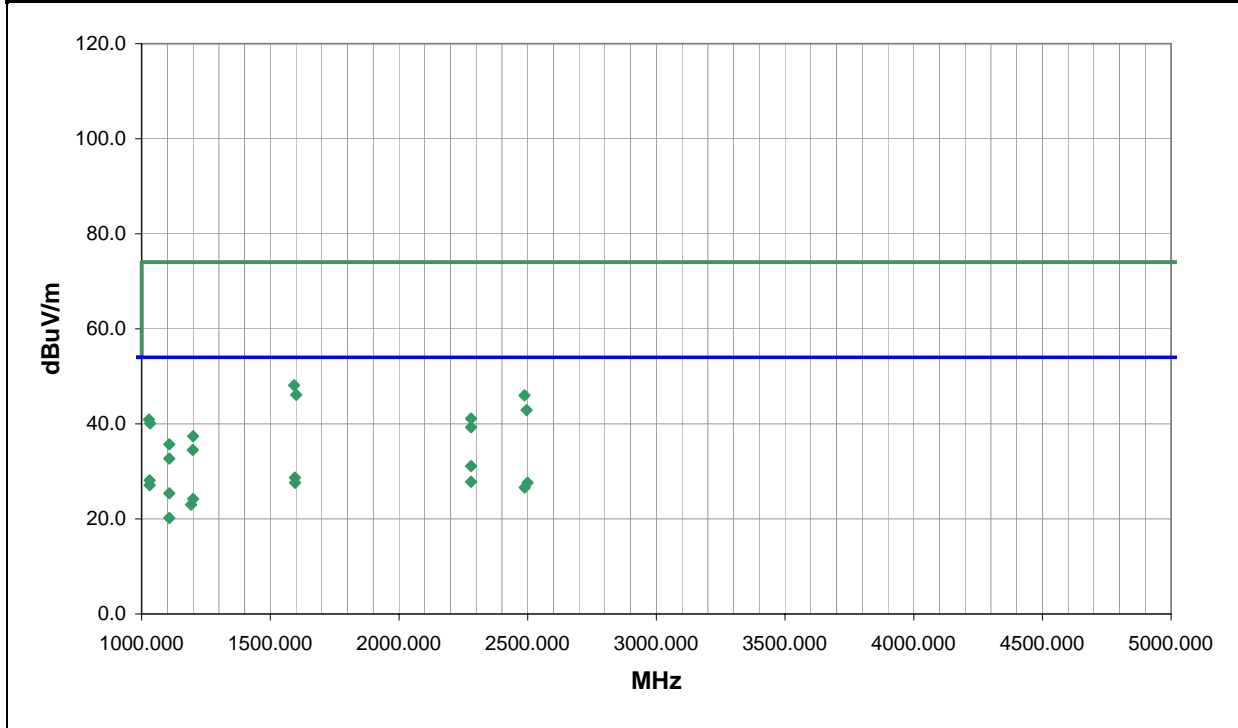
**COMMENTS**  
Internal antenna. Notebook configuration.

**EUT OPERATING MODES**  
Receive mode GSM Cellular band

**DEVIATIONS FROM TEST STANDARD**  
No deviations.

Run #	38	Signature <i>Holly Ashkannejhad</i>
Configuration #	3	
Results	Pass	

NVLAP Lab Code 200630-0



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Spec. (dB)	Compared to Spec. (dB)
2280.071	31.1	0.0	71.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.1	54.0	-22.9	
1595.320	31.6	-2.9	278.0	1.2	3.0	0.0	H-Horn	AV	0.0	28.7	54.0	-25.3	
1030.980	33.4	-5.3	331.0	1.2	3.0	0.0	H-Horn	AV	0.0	28.1	54.0	-25.9	
1592.390	51.0	-2.9	278.0	1.2	3.0	0.0	H-Horn	PK	0.0	48.1	74.0	-25.9	
2280.056	27.8	0.0	277.0	1.2	3.0	0.0	H-Horn	AV	0.0	27.8	54.0	-26.2	
1595.940	30.5	-2.9	347.0	1.1	3.0	0.0	V-Horn	AV	0.0	27.6	54.0	-26.4	
2499.720	27.1	0.5	128.0	1.0	3.0	0.0	V-Horn	AV	0.0	27.6	54.0	-26.4	
1030.960	32.4	-5.3	37.0	1.0	3.0	0.0	V-Horn	AV	0.0	27.1	54.0	-26.9	
2488.080	26.1	0.5	149.0	1.2	3.0	0.0	H-Horn	AV	0.0	26.6	54.0	-27.4	
1600.410	49.0	-2.9	347.0	1.1	3.0	0.0	V-Horn	PK	0.0	46.1	74.0	-27.9	
2488.030	45.5	0.5	128.0	1.0	3.0	0.0	V-Horn	PK	0.0	46.0	74.0	-28.0	
1107.442	30.4	-5.0	10.0	1.0	3.0	0.0	V-Horn	AV	0.0	25.4	54.0	-28.6	
1200.050	28.7	-4.5	203.0	1.0	3.0	0.0	V-Horn	AV	0.0	24.2	54.0	-29.8	
1191.970	27.5	-4.5	-1.0	1.5	3.0	0.0	H-Horn	AV	0.0	23.0	54.0	-31.0	
2495.600	42.4	0.5	149.0	1.2	3.0	0.0	H-Horn	PK	0.0	42.9	74.0	-31.1	
2280.118	41.1	0.0	71.0	1.0	3.0	0.0	V-Horn	PK	0.0	41.1	74.0	-32.9	
1028.470	46.2	-5.3	331.0	1.2	3.0	0.0	H-Horn	PK	0.0	40.9	74.0	-33.1	
1107.446	25.2	-5.0	221.0	1.2	3.0	0.0	H-Horn	AV	0.0	20.2	54.0	-33.8	
1033.210	45.4	-5.3	37.0	1.0	3.0	0.0	V-Horn	PK	0.0	40.1	74.0	-33.9	
2279.819	39.3	0.0	277.0	1.2	3.0	0.0	H-Horn	PK	0.0	39.3	74.0	-34.7	
1199.920	41.9	-4.5	203.0	1.0	3.0	0.0	V-Horn	PK	0.0	37.4	74.0	-36.6	

<b>Freq (MHz)</b>	<b>Amplitude (dBuV)</b>	<b>Factor (dB)</b>	<b>Azimuth (degrees)</b>	<b>Height (meters)</b>	<b>Distance (meters)</b>	<b>External Attenuation (dB)</b>	<b>Polarity</b>	<b>Detector</b>	<b>Distance Adjustment (dB)</b>	<b>Adjusted dBuV/m</b>	<b>Spec. Limit dBuV/m</b>	<b>Compared to Spec. (dB)</b>
1107.265	40.7	-5.0	10.0	1.0	3.0	0.0	V-Horn	PK	0.0	35.7	74.0	-38.3
1198.890	39.0	-4.5	-1.0	1.5	3.0	0.0	H-Horn	PK	0.0	34.5	74.0	-39.5
1107.689	37.7	-5.0	221.0	1.2	3.0	0.0	H-Horn	PK	0.0	32.7	74.0	-41.3



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

#### MODES OF OPERATION

Receive mode GSM Cellular band

#### POWER SETTINGS INVESTIGATED

120VAC/60Hz

#### SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

#### TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8568B	AAI	12/21/2005	13
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQD	12/21/2005	13
High Pass Filter	T.T.E.	7766	HFG	12/19/2005	13
LISN	Solar	9252-50-R-24-BNC	LIQ	12/13/2005	13

#### MEASUREMENT BANDWIDTHS

	Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

#### MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

#### TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50  $\Omega$  measuring port is terminated by a 50  $\Omega$  EMI meter or a 50  $\Omega$  resistive load. All 50  $\Omega$  measuring ports of the LISN are terminated by 50 $\Omega$ .

EUT: IX600-MC8765	Work Order: SPTE0026
Serial Number: 35922600004984	Date: 06/06/06
Customer: Spectrum Technology	Temperature: 23
Attendees: None	Humidity: 47%
Project: Noe	Barometric Pres.: 29.98
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

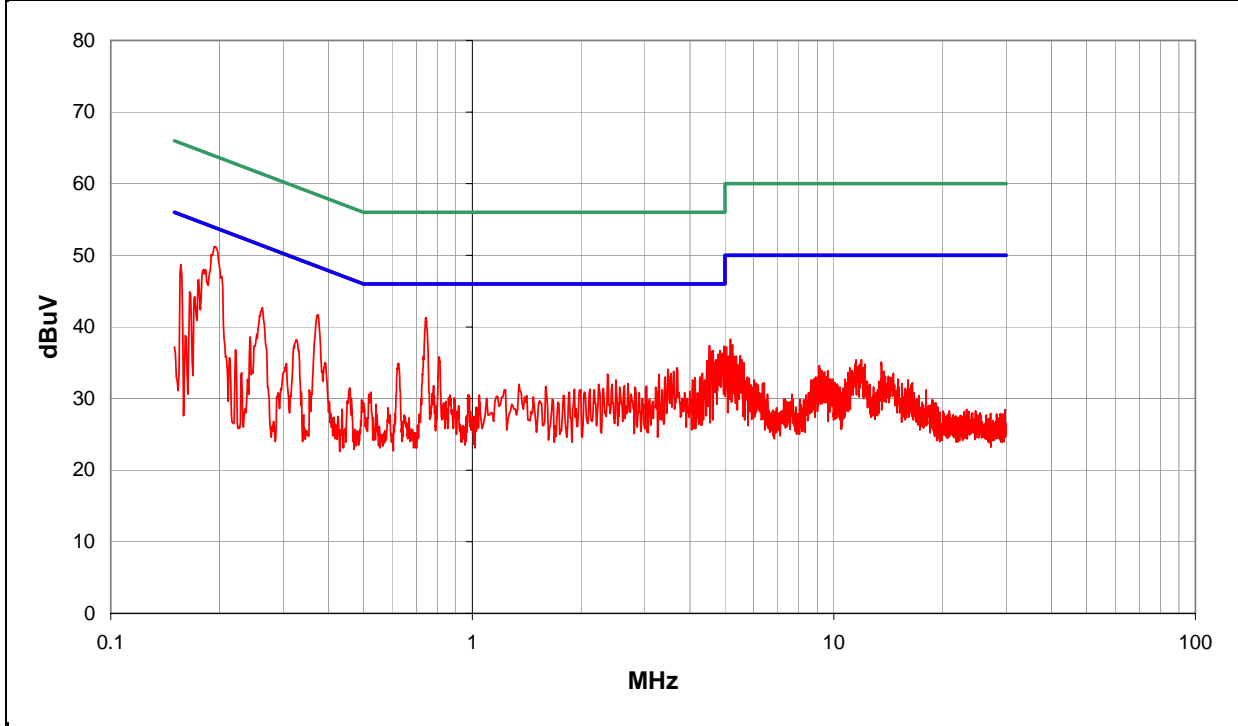
TEST PARAMETERS
Cable or Line Tested: L1

**COMMENTS**  
Internal antenna. Notebook standalone configuration.

**EUT OPERATING MODES**  
Receive mode GSM Cellular band.

**DEVIATIONS FROM TEST STANDARD**  
No deviations.

Run #	1	NVLAP Lab Code 200630-0 Signature: <i>Rodry Le Peloquin</i>
Configuration #	3	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Transducer (dB)	Cable (dB)	External Attenuation (dB)	Detector (blank equal peaks [PK] from scan)	Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.193	31.2	0.0	0.0	20.0		51.2	53.9	-2.7
0.745	21.3	0.0	0.0	20.0		41.3	46.0	-4.7
0.181	28.0	0.0	0.0	20.0		48.0	54.5	-6.5
0.374	21.7	0.0	0.0	20.0		41.7	48.4	-6.7
0.156	28.7	0.0	0.0	20.0		48.7	55.7	-7.0
0.175	26.6	0.0	0.0	20.0		46.6	54.7	-8.1
4.527	17.4	0.0	0.0	20.0		37.4	46.0	-8.6
0.263	22.7	0.0	0.0	20.0		42.7	51.4	-8.7
4.977	17.3	0.0	0.0	20.0		37.3	46.0	-8.7
4.637	16.7	0.0	0.0	20.0		36.7	46.0	-9.3
4.847	16.7	0.0	0.0	20.0		36.7	46.0	-9.3
4.587	16.6	0.0	0.0	20.0		36.6	46.0	-9.4
4.917	16.3	0.0	0.0	20.0		36.3	46.0	-9.7
4.787	16.2	0.0	0.0	20.0		36.2	46.0	-9.8
0.810	15.8	0.0	0.0	20.0		35.8	46.0	-10.2
0.165	24.9	0.0	0.0	20.0		44.9	55.2	-10.3
4.717	15.4	0.0	0.0	20.0		35.4	46.0	-10.6
4.457	15.3	0.0	0.0	20.0		35.3	46.0	-10.7
0.171	24.2	0.0	0.0	20.0		44.2	54.9	-10.7



EUT:	IX600-MC8765	Work Order:	SPTE0026
Serial Number:	35922600004984	Date:	06/06/06
Customer:	Spectrum Technology	Temperature:	23
Attendees:	None	Humidity:	47%
Project:	None	Barometric Pres.:	29.98
Tested by:	Rod Peloquin	Power:	120VAC/60Hz
		Job Site:	EV07

TEST SPECIFICATIONS		Test Method
FCC 15.107 Class B:2005-10		ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

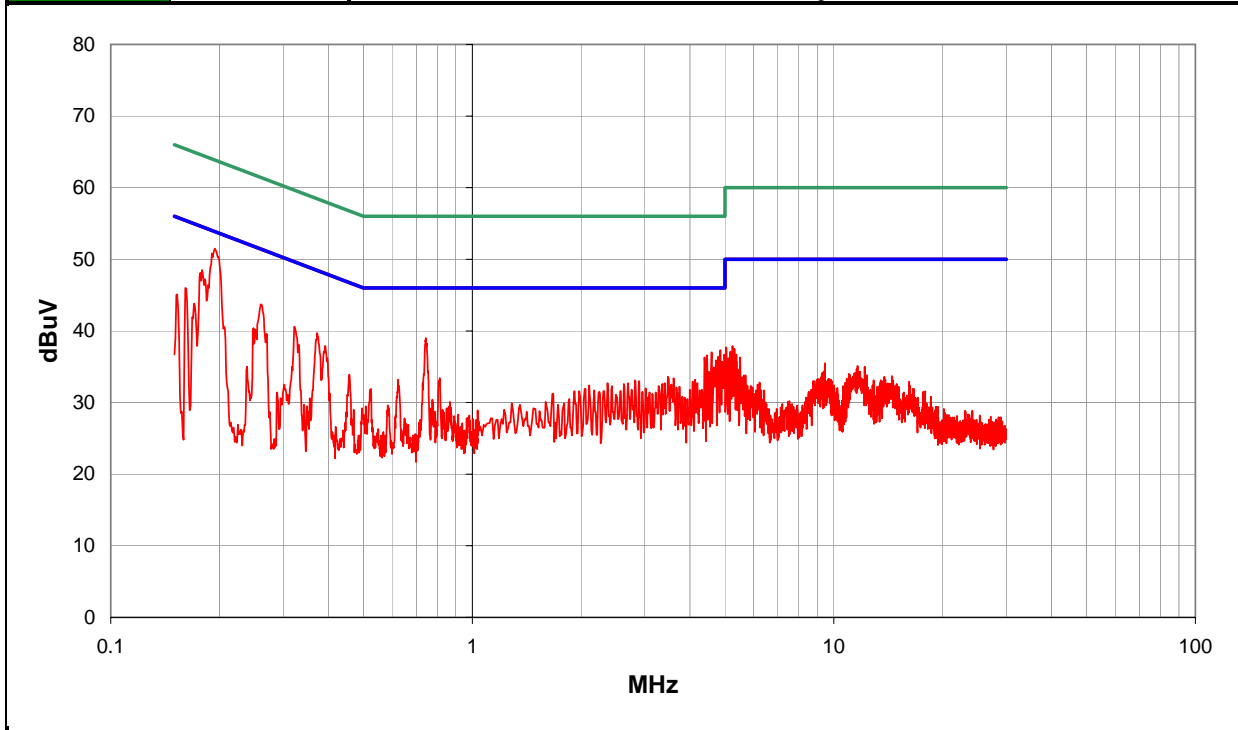
**COMMENTS**  
Internal antenna. Notebook standalone configuration.

**EUT OPERATING MODES**  
Receive mode GSM Cellular band.

**DEVIATIONS FROM TEST STANDARD**  
No deviations.

Run #	2	<i>Rod Peloquin</i> Signature
Configuration #	3	
Results	Pass	

NVLAP Lab Code 200630-0



Freq (MHz)	Amplitude (dBuV)	Transducer (dB)	Cable (dB)	External Attenuation (dB)	Detector (blank equal peaks [PK] from scan)	Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.194	31.5	0.0	0.0	20.0		51.5	53.9	-2.4
0.179	28.5	0.0	0.0	20.0		48.5	54.5	-6.0
0.744	19.0	0.0	0.0	20.0		39.0	46.0	-7.0
0.260	23.7	0.0	0.0	20.0		43.7	51.4	-7.7
4.847	17.3	0.0	0.0	20.0		37.3	46.0	-8.7
0.372	19.7	0.0	0.0	20.0		39.7	48.4	-8.7
4.587	17.0	0.0	0.0	20.0		37.0	46.0	-9.0
0.322	20.6	0.0	0.0	20.0		40.6	49.7	-9.1
4.977	16.7	0.0	0.0	20.0		36.7	46.0	-9.3
4.457	16.6	0.0	0.0	20.0		36.6	46.0	-9.4
0.161	26.0	0.0	0.0	20.0		46.0	55.4	-9.4
4.787	16.4	0.0	0.0	20.0		36.4	46.0	-9.6
4.387	16.3	0.0	0.0	20.0		36.3	46.0	-9.7
4.717	15.9	0.0	0.0	20.0		35.9	46.0	-10.1
0.391	17.9	0.0	0.0	20.0		37.9	48.0	-10.1
4.917	15.7	0.0	0.0	20.0		35.7	46.0	-10.3
0.153	25.1	0.0	0.0	20.0		45.1	55.9	-10.8
4.657	14.9	0.0	0.0	20.0		34.9	46.0	-11.1
0.170	23.8	0.0	0.0	20.0		43.8	55.0	-11.2

