Alcon Laboratories, Inc.

PurePoint, NGL

November 07, 2007

Report No. ALCO0063

Report Prepared By

www.nwemc.com
1-888-EMI-CERT

EMC Test Report

NORTHWEST EMC

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Issue Date: November 07, 2007
Alcon Laboratories, Inc.
Model: PurePoint, NGL

Emissions			
Test Description	**Specification**	**Test Method**	**Pass/Fail**
Radiated Emissions of Digital Electronics	FCC 15.109(g) (CISPR 22:1997):2006 Class A	ANSI C63.4:2003	**Pass**
Field Strength of Fundamental	FCC 15.225:2006	ANSI C63.4:2003	**Pass**
Field Strength of Spurious Emissions	FCC 15.225:2006	ANSI C63.4:2003	**Pass**
Powerline Conducted Emissions	FCC 15.207:2006	ANSI C63.4:2003	**Pass**
Frequency Stability	FCC 15.225:2006	ANSI C63.4:2003	**Pass**

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

Test Facility

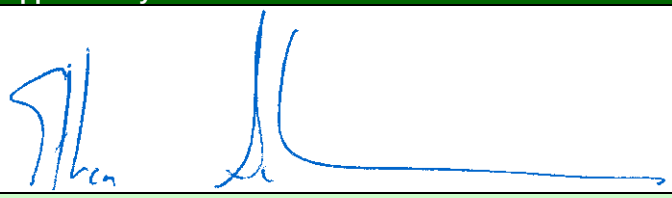
The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
41 Tesla Ave.
Irvine, CA 92618

Phone: (503) 844-4066 Fax: 844-3826

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada.

Approved By:



Ethan Schoonover, Sultan Lab Manager

NVLAP Lab Code: 200676-0

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		

Accreditations and Authorizations

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 2004/108/EC, and ANSI C63.4. 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.

NVLAP LAB CODE 200629-0
NVLAP LAB CODE 200630-0
NVLAP LAB CODE 200676-0
NVLAP LAB CODE 200761-0

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 TUV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TUV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TUV's current Listing of CARAT Laboratories, available from TUV. A certificate was issued to represent that this laboratory continues to meet TUV's CARAT Program requirements. Certificate No. USA0604C.

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).

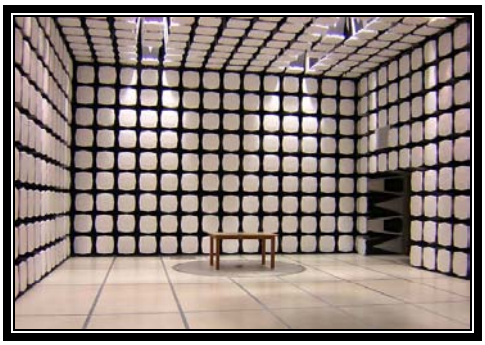
VCCI: Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. *(Registration Numbers. - Hillsboro: C-1071, R-1025, C-2687, T-289, and R-2318, Irvine: R-1943, C-2766, and T-298, Sultan: R-871, C-1784, and T-294).*

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

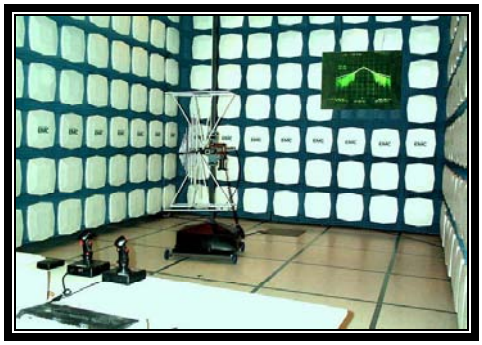
SCOPE

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 339th Ave. SE Sultan, WA 98294
(888) 364-2378

Party Requesting the Test

Company Name:	Alcon Laboratories, Inc.
Address:	15800 Alton Parkway
City, State, Zip:	Irvine, CA 92618-3818
Test Requested By:	Thai Lam
Model:	PurePoint, NGL
First Date of Test:	October 23, 2007
Last Date of Test:	October 31, 2007
Receipt Date of Samples:	October 23, 2007
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
13.56 MHz RFID. This is a low Power Part 15 transmitter.

Testing Objective:
RFID reads passive tag (probe) at a very close ranges (1 - 2cm Max). Seeking to demonstrate compliance to FCC 15.225 requirements.

CONFIGURATION 1 ALCO0063

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
PurePoint	Alcon Laboratories, Inc.	562-0000-501	Beta #16

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Foot Switch	Alcon Laboratories, Inc.	562-1383-001	None
Headset/LIO	Alcon Laboratories, Inc.	8065751050	0702813901X
Laser Probe Straight	Alcon Laboratories, Inc.	8065-0102-19	None
Slit Lamp	Alcon Laboratories, Inc.	8065740982	None
Safety Filter	Alcon Laboratories, Inc.	8065750260	0601862302X
Safety Filter	Alcon Laboratories, Inc.	8065750260	0502860502X
Interlock Adapter	Alcon Laboratories, Inc.	None	None

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Remote Laptop	Dell Latitude	C840	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
LIO	No	6.5m	No	Headset	PurePoint
Safety Filter (2)	No	5.12m	No	Safety Filter	PurePoint
Laser Probe Fiber	No	2.4m	No	Laser Probe Straight	PurePoint
Ethernet	Yes	7.62m	No	PurePoint	Unterminated
AC Cable	No	5m	No	PurePoint	AC Mains
Foot Switch Cable	No	4.6m	No	Foot Switch	PurePoint
Laser Probe Fiber	No	.9m	No	PurePoint	Unterminated
Serial Cable	No	1.8m	No	PurePoint	Unterminated
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Equipment modifications					
Item	Date	Test	Modification	Note	Disposition of EUT
1	10/29/2007	Frequency Stability	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	10/29/2007	Field Strength of Fundamental	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.
3	10/30/2007	Powerline 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.
4	10/31/2007	Field Strength of Spurious 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.
5	10/31/2007	Radiated Emissions of Digital Electronics	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing 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

Radio On at 13.56 MHz.

MODE USED FOR FINAL DATA

Radio On at 13.56 MHz.

POWER SETTINGS INVESTIGATED

120/60Hz

POWER SETTINGS USED FOR FINAL DATA

120/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	1000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Pre-Amplifier	Miteq	AM-1551	AOX	8/19/2006	24
OC08 cables b,c,d,f			OCB	8/23/2007	13
Antenna, Biconilog	EMCO	3142	AXK	3/14/2006	24
Spectrum Analyzer	Agilent	E4443A	AAR	1/18/2007	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, 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.

NORTHWEST

EMC

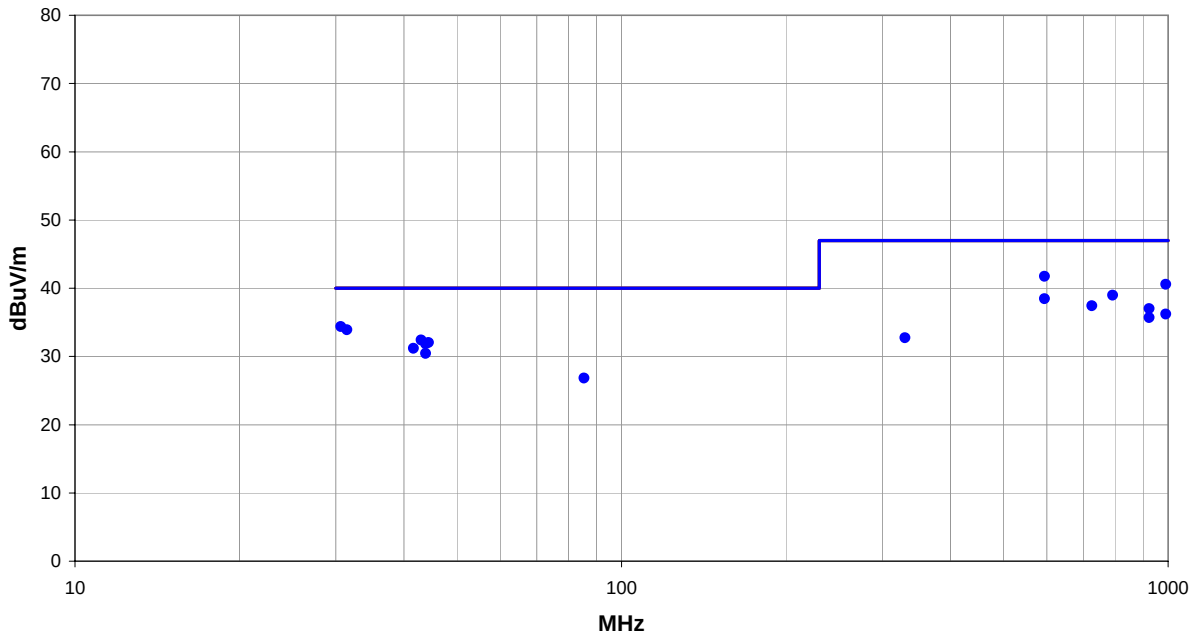
RADIATED EMISSIONS

Version 2007.8.5
PSA-ESCI 2007.05.07

Work Order:	ALCO0063	**Date:**	10/31/07		
Project:	None	**Temperature:**	24.7C		
Job Site:	OC08	**Humidity:**	41.9		
Serial Number:	Beta 16	**Barometric Pres.:**	1012.1 mb	**Tested by:**	Jaemi Suh
EUT:	PurePoint, NGL				
Configuration:	1 - Basic Config				
Customer:	Alcon Laboratories, Inc.				
Attendees:	Thai Lam				
EUT Power:	120/60Hz				
Operating Mode:	Radio On at 13.56 MHz.				
Deviations:	No deviations.				
Comments:	Radio turned on Continous via Remote Laptop.				

Test Specifications	**Class A**	**Test Method**
FCC 15.109(g) (CISPR 22:1997):2006		ANSI C63.4:2003

Run #	1	**Test Distance (m)**	10	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq	Amplitude	Factor	Antenna Height	Azimuth (degrees)	Test Distance	External Attenuation	Polarity/ Transducer Type	Detector	Distance Adjustment	Adjusted	Spec. Limit	Compared to Spec. (dB)
30.653	52.2	-17.8	1.0	-2.0	10.0	0.0	Vert	QP	0.0	34.4	40.0	-5.6
594.000	54.5	-12.8	2.3	196.0	10.0	0.0	Vert	QP	0.0	41.7	47.0	-5.3
31.435	52.2	-18.3	1.0	15.0	10.0	0.0	Vert	QP	0.0	33.9	40.0	-6.1
42.979	56.3	-23.9	1.0	34.0	10.0	0.0	Vert	QP	0.0	32.4	40.0	-7.6
44.374	56.4	-24.4	1.0	76.0	10.0	0.0	Vert	QP	0.0	32.0	40.0	-8.0
43.825	56.0	-24.2	1.0	74.0	10.0	0.0	Vert	QP	0.0	31.8	40.0	-8.2
792.006	49.6	-10.6	1.0	127.0	10.0	0.0	Horz	QP	0.0	39.0	47.0	-8.0
41.616	54.6	-23.4	2.0	18.0	10.0	0.0	Vert	QP	0.0	31.2	40.0	-8.8
594.007	51.2	-12.8	1.5	163.0	10.0	0.0	Horz	QP	0.0	38.4	47.0	-8.6
43.807	54.6	-24.2	1.0	73.0	10.0	0.0	Vert	QP	0.0	30.4	40.0	-9.6
990.004	48.7	-8.1	1.5	319.0	10.0	0.0	Vert	QP	0.0	40.6	47.0	-6.4
726.001	48.5	-11.1	2.0	-2.0	10.0	0.0	Vert	QP	0.0	37.4	47.0	-9.6
923.993	45.6	-8.6	1.4	43.0	10.0	0.0	Vert	QP	0.0	37.0	47.0	-10.0
924.000	44.3	-8.6	1.0	189.0	10.0	0.0	Horz	QP	0.0	35.7	47.0	-11.3
85.458	54.6	-27.8	1.5	250.0	10.0	0.0	Vert	QP	0.0	26.8	40.0	-13.2
990.001	44.3	-8.1	2.5	242.0	10.0	0.0	Horz	QP	0.0	36.2	47.0	-10.8
330.000	51.5	-18.8	2.0	264.0	10.0	0.0	Horz	QP	0.0	32.7	47.0	-14.3


EMC

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

Radio On at 13.56 MHz

POWER SETTINGS INVESTIGATED

120V/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
LISN	Solar	9252-50-24-BNC	LIA	6/26/2007	13
LISN	Solar	9252-50-24-BNC	LIB	5/8/2006	24
OC11 cables a-b-e-f			OCM	1/8/2007	13
Receiver	Rohde & Schwartz	ESCI	ARF	12/14/2006	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 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

NORTHWEST

EMC

CONDUCTED EMISSIONS

Version 2006.11.12
PSA-ESCI 2007.05.07

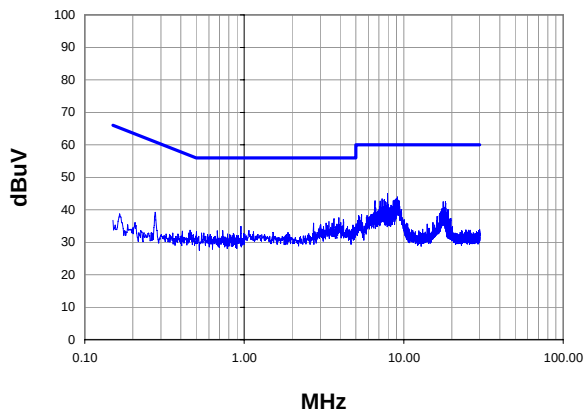
Work Order:	ALCO0063	**Date:**	10/23/07	
Project:	None	**Temperature:**	23.7	
Job Site:	OC06	**Humidity:**	19.65	
Serial Number:	Beta 16	**Barometric Pres.:**	1018.96mb	**Tested by:** Luis Flores

EUT:	PurePoint, NGL
Configuration:	1 - Basic Config
Customer:	Alcon Laboratories, Inc.
Attendees:	Thai Lam
EUT Power:	120V/60Hz
Operating Mode:	Radio On at 13.56 MHz
Deviations:	No Deviations
Comments:	None

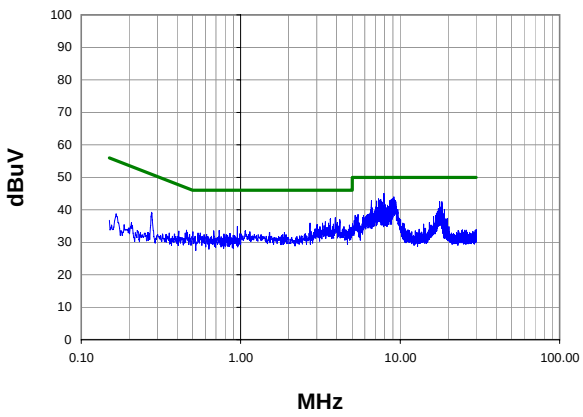
Test Specifications	**Test Method**
FCC 15.207:2006	ANSI C63.4:2003

Run #	7	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted	Spec. Limit	Compared to Spec. (dB)
7.930	24.1	0.9	45.0	60.0	-15.0
9.130	23.0	0.9	43.9	60.0	-16.1
9.010	22.6	0.9	43.5	60.0	-16.5
7.310	22.5	0.9	43.4	60.0	-16.6
8.890	22.4	0.9	43.3	60.0	-16.7
7.540	22.3	0.9	43.2	60.0	-16.8
9.190	22.2	0.9	43.1	60.0	-16.9
7.380	22.1	0.9	43.0	60.0	-17.0
8.720	22.1	0.9	43.0	60.0	-17.0
6.600	21.9	0.9	42.8	60.0	-17.2
8.580	21.9	0.9	42.8	60.0	-17.2
9.330	21.8	0.9	42.7	60.0	-17.3
7.100	21.8	0.9	42.7	60.0	-17.3
7.660	21.6	0.9	42.5	60.0	-17.5
17.690	21.3	1.2	42.5	60.0	-17.5
18.250	21.3	1.2	42.5	60.0	-17.5
9.390	21.5	0.9	42.4	60.0	-17.6
9.250	21.5	0.9	42.4	60.0	-17.6
9.070	21.4	0.9	42.3	60.0	-17.7
7.730	21.4	0.9	42.3	60.0	-17.7

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted	Spec. Limit	Compared to Spec. (dB)
7.930	24.1	0.9	45.0	50.0	-5.0
9.130	23.0	0.9	43.9	50.0	-6.1
9.010	22.6	0.9	43.5	50.0	-6.5
7.310	22.5	0.9	43.4	50.0	-6.6
8.890	22.4	0.9	43.3	50.0	-6.7
7.540	22.3	0.9	43.2	50.0	-6.8
9.190	22.2	0.9	43.1	50.0	-6.9
7.380	22.1	0.9	43.0	50.0	-7.0
8.720	22.1	0.9	43.0	50.0	-7.0
6.600	21.9	0.9	42.8	50.0	-7.2
8.580	21.9	0.9	42.8	50.0	-7.2
9.330	21.8	0.9	42.7	50.0	-7.3
7.100	21.8	0.9	42.7	50.0	-7.3
7.660	21.6	0.9	42.5	50.0	-7.5
17.690	21.3	1.2	42.5	50.0	-7.5
18.250	21.3	1.2	42.5	50.0	-7.5
9.390	21.5	0.9	42.4	50.0	-7.6
9.250	21.5	0.9	42.4	50.0	-7.6
9.070	21.4	0.9	42.3	50.0	-7.7
7.730	21.4	0.9	42.3	50.0	-7.7

NORTHWEST

EMC

CONDUCTED EMISSIONS

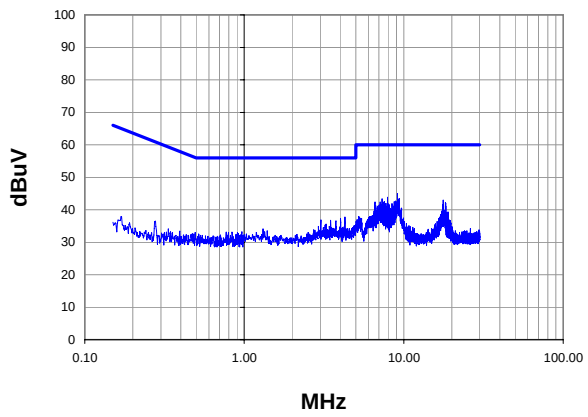
Version 2006.11.12
PSA-ESCI 2007.05.07

Work Order:	ALCO0063	**Date:**	10/23/07		
Project:	None	**Temperature:**	23.7		
Job Site:	OC06	**Humidity:**	19.65		
Serial Number:	Beta 16	**Barometric Pres.:**	1018.96mb	**Tested by:**	Luis Flores
EUT:	PurePoint, NGL				
Configuration:	1 - Basic Config				
Customer:	Alcon Laboratories, Inc.				
Attendees:	Thai Lam				
EUT Power:	120V/60Hz				
Operating Mode:	Radio On at 13.56 MHz				
Deviations:	No Deviations				
Comments:	None				

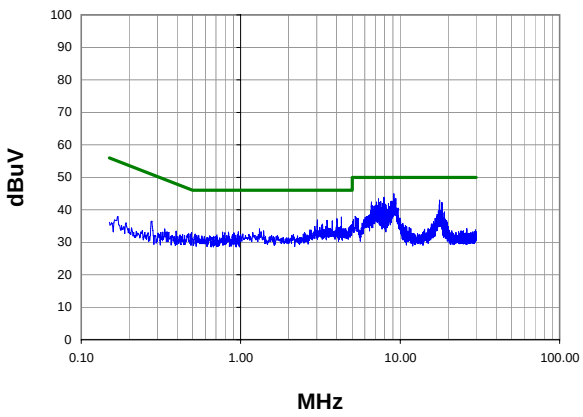
Test Specifications	**Test Method**
FCC 15.207:2006	ANSI C63.4:2003

Run #	8	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit

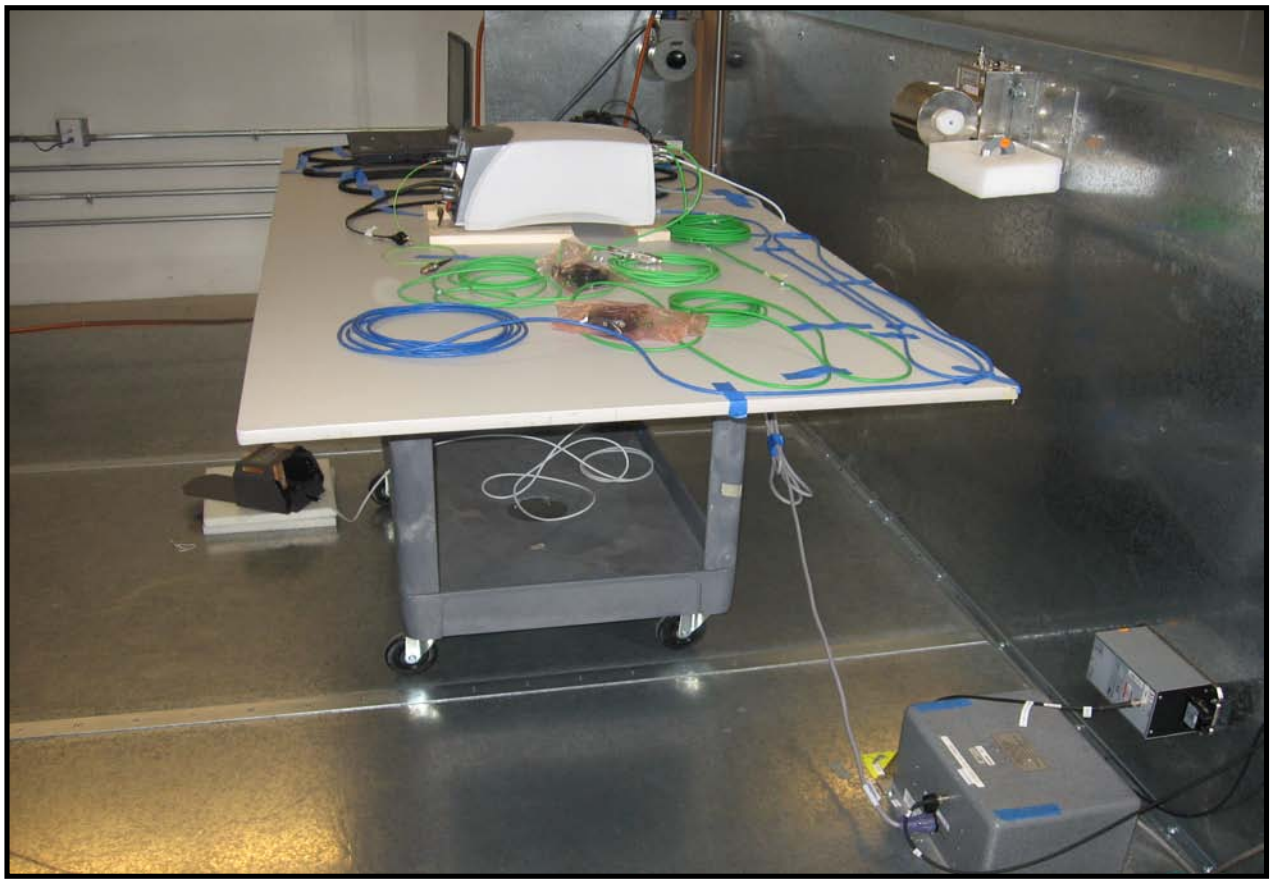


Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted	Spec. Limit	Compared to Spec. (dB)
9.130	24.0	0.9	44.9	60.0	-15.1
7.920	23.0	0.9	43.9	60.0	-16.1
9.390	22.5	0.9	43.4	60.0	-16.6
7.310	22.5	0.9	43.4	60.0	-16.6
9.310	22.3	0.9	43.2	60.0	-16.8
17.690	21.8	1.2	43.0	60.0	-17.0
9.240	21.9	0.9	42.8	60.0	-17.2
8.890	21.8	0.9	42.7	60.0	-17.3
7.540	21.7	0.9	42.6	60.0	-17.4
8.720	21.6	0.9	42.5	60.0	-17.5
8.950	21.6	0.9	42.5	60.0	-17.5
6.600	21.5	0.9	42.4	60.0	-17.6
7.100	21.5	0.9	42.4	60.0	-17.6
7.420	21.4	0.9	42.3	60.0	-17.7
18.240	21.1	1.2	42.3	60.0	-17.7
7.380	21.2	0.9	42.1	60.0	-17.9
7.730	21.1	0.9	42.0	60.0	-18.0
9.010	21.1	0.9	42.0	60.0	-18.0
18.310	20.8	1.2	42.0	60.0	-18.0
8.460	21.0	0.9	41.9	60.0	-18.1

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted	Spec. Limit	Compared to Spec. (dB)
9.130	24.0	0.9	44.9	50.0	-5.1
7.920	23.0	0.9	43.9	50.0	-6.1
9.390	22.5	0.9	43.4	50.0	-6.6
7.310	22.5	0.9	43.4	50.0	-6.6
9.310	22.3	0.9	43.2	50.0	-6.8
17.690	21.8	1.2	43.0	50.0	-7.0
9.240	21.9	0.9	42.8	50.0	-7.2
8.890	21.8	0.9	42.7	50.0	-7.3
7.540	21.7	0.9	42.6	50.0	-7.4
8.720	21.6	0.9	42.5	50.0	-7.5
8.950	21.6	0.9	42.5	50.0	-7.5
6.600	21.5	0.9	42.4	50.0	-7.6
7.100	21.5	0.9	42.4	50.0	-7.6
7.420	21.4	0.9	42.3	50.0	-7.7
18.240	21.1	1.2	42.3	50.0	-7.7
7.380	21.2	0.9	42.1	50.0	-7.9
7.730	21.1	0.9	42.0	50.0	-8.0
9.010	21.1	0.9	42.0	50.0	-8.0
18.310	20.8	1.2	42.0	50.0	-8.0
8.460	21.0	0.9	41.9	50.0	-8.1



Field Strength of Fundamental

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

Radio On at 13.56 MHz.

MODE USED FOR FINAL DATA

Radio On at 13.56 MHz.

POWER SETTINGS INVESTIGATED

120VAC/60Hz

POWER SETTINGS USED FOR FINAL DATA

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	15 KHz	Stop Frequency	30 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
OC10 cables a,b,c,d Bilog			OCH	12/17/2006	13
Spectrum Analyzer	Agilent	E4446A	AAQ	1/18/2007	13
Antenna, Loop	EMCO	6502	AZB	12/2/2006	24

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

The antennas to be used with the EUT were tested. The EUT was transmitting and receiving while set at the lowest channel, a middle channel, and the highest channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:2003).

NORTHWEST EMC

Field Strength of Fundamental

PSA 2007.05.07
EMI 2006.4.26

EUT:	PurePoint, NGL			Work Order:	ALCO0063
Serial Number:	Beta 16			Date:	10/29/07
Customer:	Alcon Laboratories, Inc.			Temperature:	24.7C
Attendees:	none			Humidity:	42%
Project:	None			Barometric Pres.:	1012.1 mb
Tested by:	Jaemi Suh	Power:	120VAC/60Hz	Job Site:	OC10

TEST SPECIFICATIONS	Test Method
FCC 15.225:2006	ANSI C63.4:2003

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

COMMENTS

Radio turned on Continous via Remote Laptop.

EUT OPERATING MODES

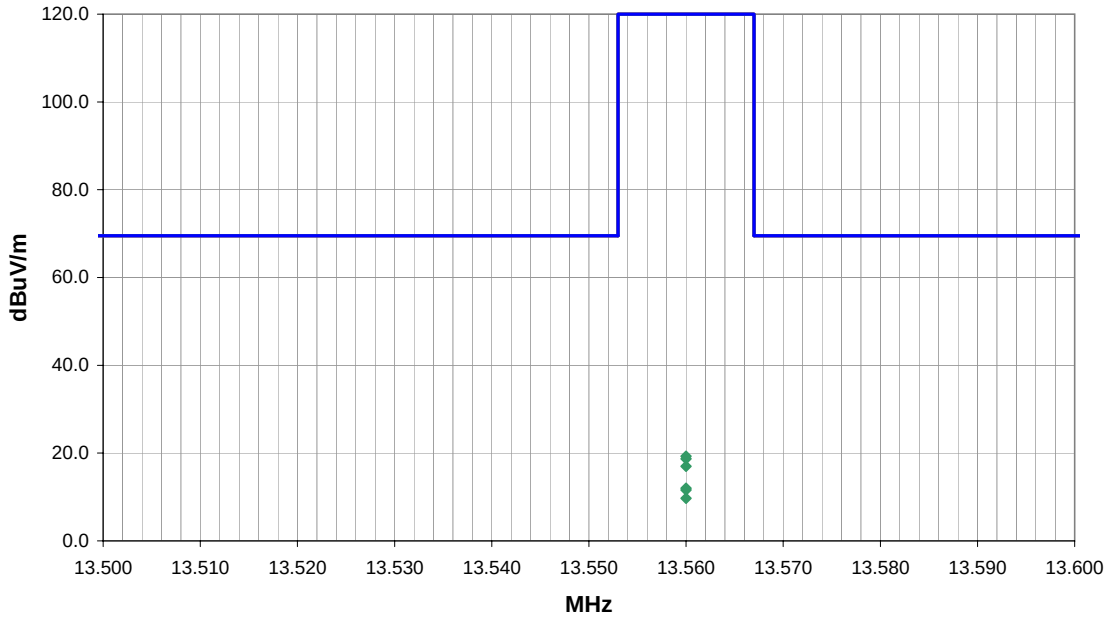
Radio On at 13.56 MHz.

DEVIATIONS FROM TEST STANDARD

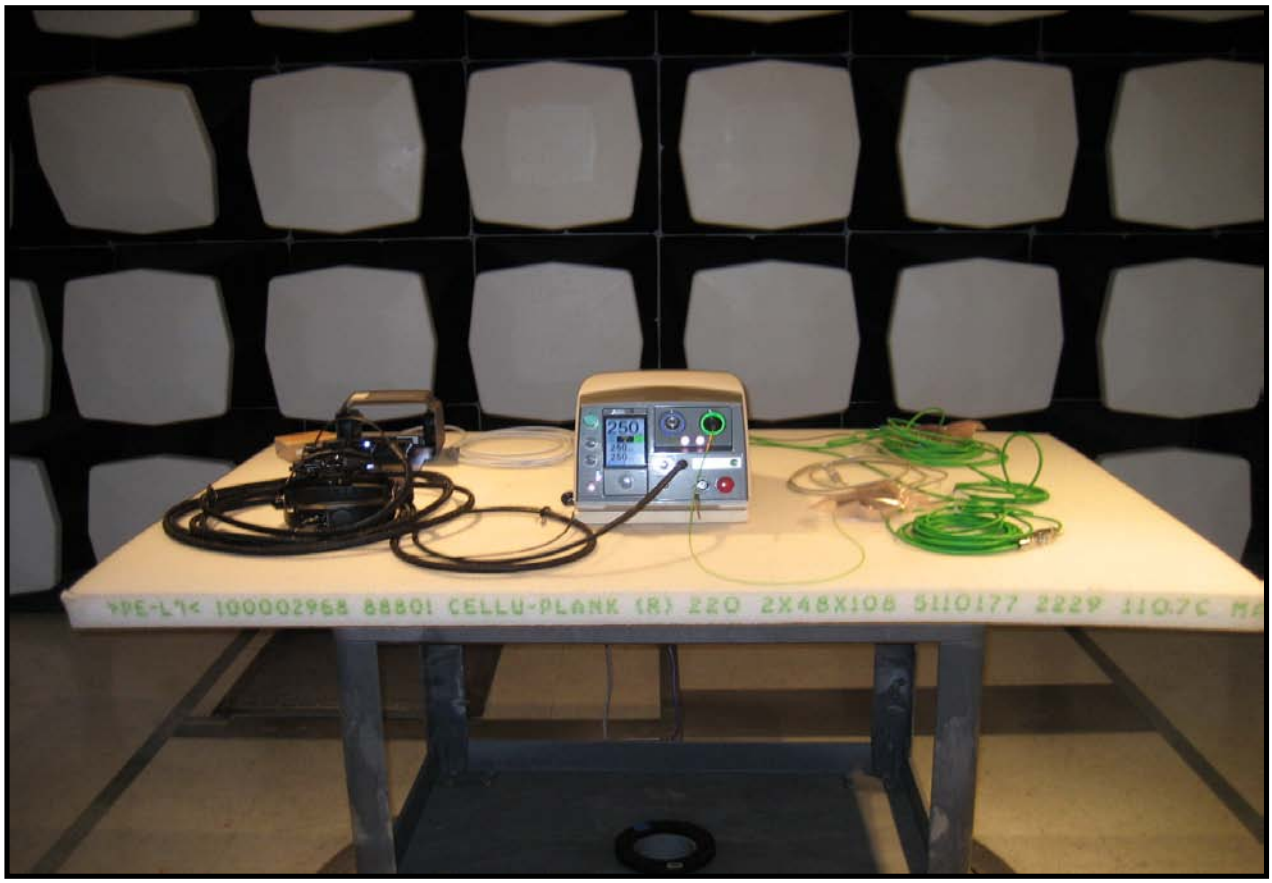
No deviations.

Run #	1
Configuration #	1
Results	Pass

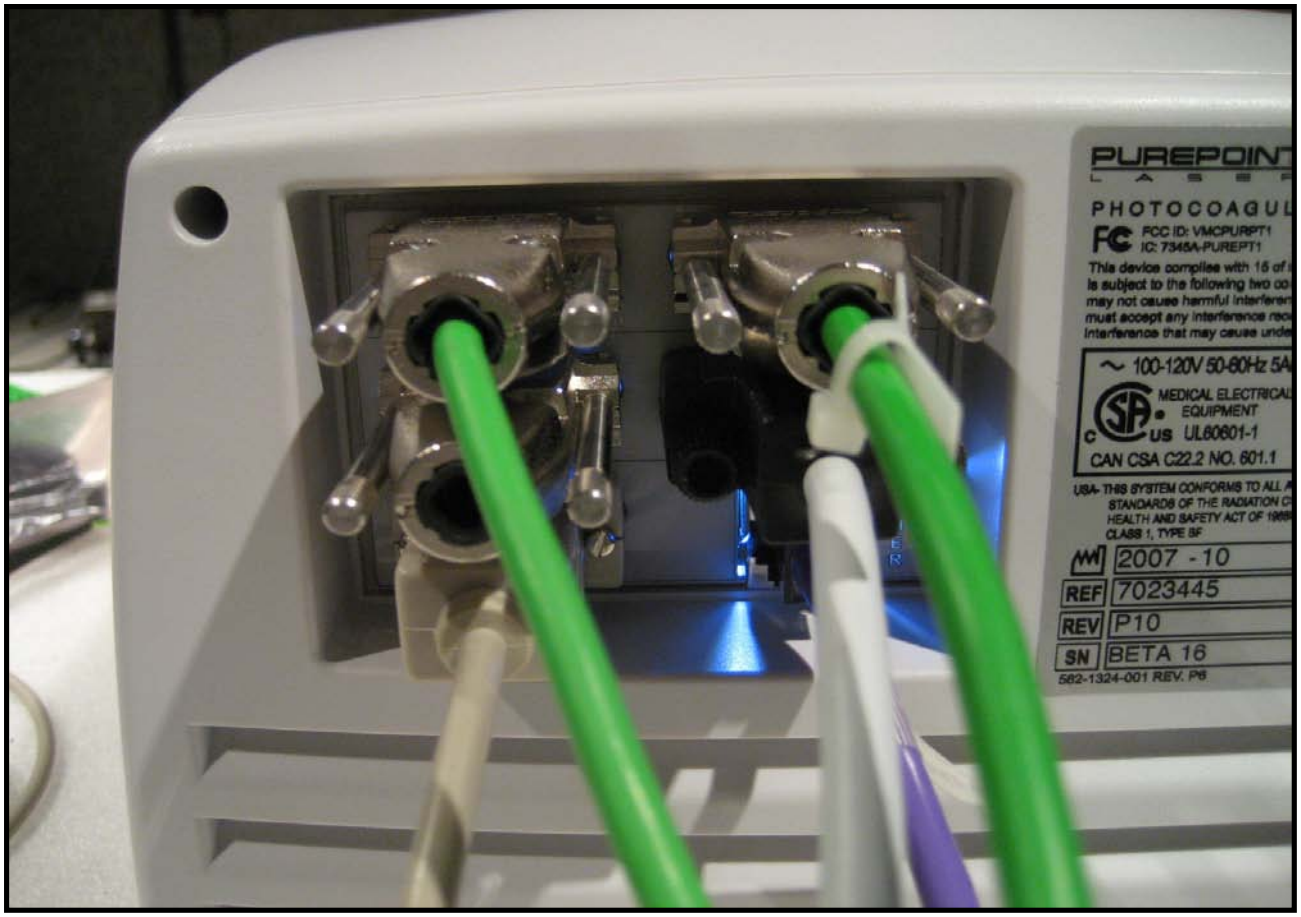
Signature



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)	Comments
13.560	8.4	10.9	337.0	1.0	0.0	0.0	oop/Active	PK	0.0	19.3	120.0	-100.7	Z-Axis
13.560	7.8	10.9	252.0	1.4	0.0	0.0	oop/Active	PK	0.0	18.7	120.0	-101.3	Y-Axis
13.560	6.1	10.9	33.0	1.2	0.0	0.0	oop/Active	PK	0.0	17.0	120.0	-103.0	X-Axis
13.560	1.1	10.9	337.0	1.0	0.0	0.0	oop/Active	QP	0.0	12.0	120.0	-108.0	Z-Axis
13.560	0.7	10.9	252.0	1.4	0.0	0.0	oop/Active	QP	0.0	11.6	120.0	-108.4	Y-Axis
13.560	-1.2	10.9	33.0	1.2	0.0	0.0	oop/Active	QP	0.0	9.7	120.0	-110.3	X-Axis


250
CELLU-PLANK (R) 220 2X48X108

Field Strength of Fundamental



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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Programmable Power Supply	Hewlett-Packard	6843A	THB	12/14/2006	13
Spectrum Analyzer	Hewlett Packard	8593E	AAP	12/14/2006	13
Temperature Chamber	Cincinnati Sub Zero	Z-32 PLUS	TBE	5/2/2007	12

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

Variation of Supply Voltage

The primary supply voltage was varied from 85% to 115% of nominal. The EUT can only be operated from the public AC mains, so an AC lab supply was used to vary the supply voltage from 115% to 85% of 120 V, 60 Hz.

Variation of Ambient Temperature

Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (-20° to +50° C) and at 10°C intervals.

Measurements were made at the single transmit frequency. The antenna is integral to the EUT, so a radiated measurement was made using a spectrum analyzer and a near field probe. The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

NORTHWEST EMC

Frequency Stability

XMit 2007.06.13

EUT:	PurePoint			**Work Order:**	ALCO0063
Serial Number:	Beta 16			**Date:**	10/29/07
Customer:	Alcon Laboratories, Inc.			**Temperature:**	24.7C°C
Attendees:	None			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	1012.1 mb
Tested by:	Jaemi Suh	**Power:**	120V/60Hz	**Job Site:**	OC13

TEST SPECIFICATIONS	Test Method
FCC 15.225:2006	ANSI C63.4:2003

COMMENTS

Radio turned on Continous via Remote Laptop.

DEVIATIONS FROM TEST STANDARD

None

Configuration #		Signature

	Value	Limit	Results
Temperature Frequency Stability	See Table	0.01% = 100 PPM	Pass
Voltage Frequency Stability	See Table	0.01% = 100 PPM	Pass

Frequency Stability

Temperature Frequency Stability					
Result:	Pass	**Value:**	See Table	**Limit:**	0.01% = 100 ppm

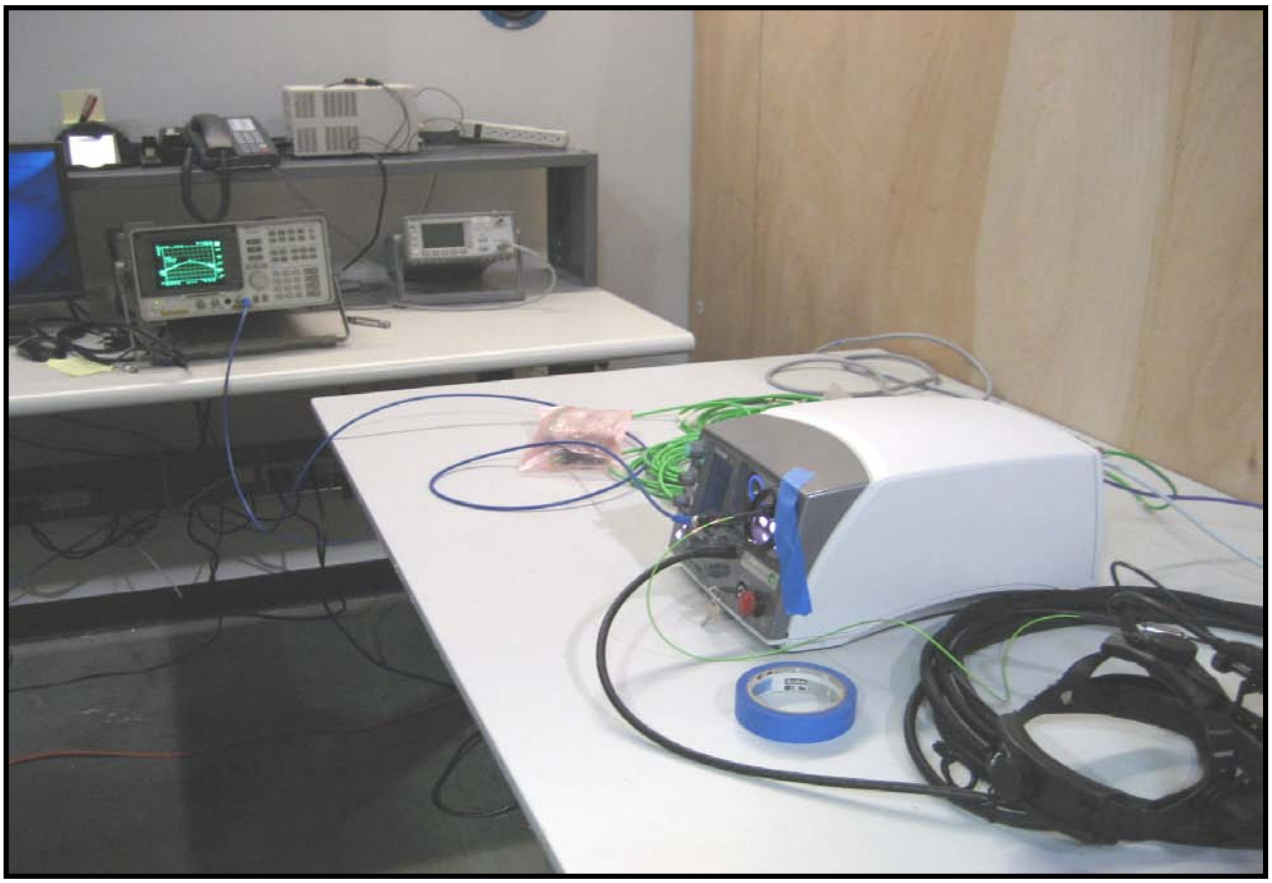
Frequency Stability with Variation of Ambient Temperature (Primary Supply = 120 VAC)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	13.560000	13.560382	28.17	100
40	13.560000	13.560402	29.65	100
30	13.560000	13.560412	30.38	100
20	13.560000	13.560510	37.61	100
10	13.560000	13.560428	31.56	100
0	13.560000	13.560428	31.56	100
-10	13.560000	13.560418	30.83	100
-20	13.560000	13.560420	30.97	100

Voltage Frequency Stability					
Result:	Pass	**Value:**	See Table	**Limit:**	0.01% = 100 ppm

Frequency Stability with Variation of AC Supply Voltage (Ambient Temperature = 20°C)

Voltage (Vac)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
138.0	13.560000	13.560464	34.22	100
132.0	13.560000	13.560467	34.44	100
126.0	13.560000	13.560452	33.33	100
120.0	13.560000	13.560452	33.33	100
114.0	13.560000	13.560461	34.00	100
108.0	13.560000	13.560458	33.78	100
102.0	13.560000	13.560462	34.07	100




100
2.0
30

Frequency Stability

Field Strength of Spurious Emissions

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

Radio On at 13.56 MHz.

MODE USED FOR FINAL DATA

Radio On at 13.56 MHz.

POWER SETTINGS INVESTIGATED

120VAC/60Hz

POWER SETTINGS USED FOR FINAL DATA

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	15 KHz	Stop Frequency	1000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Antenna, Loop	EMCO	6502	AZB	12/2/2006	24
Antenna, Biconilog	EMCO	3142	AXJ	3/14/2006	24
OC10 cables a,b,c,d Bilog			OCH	12/17/2006	13
Pre-Amplifier	Miteq	AM-1616-1000	AOM	12/17/2006	13
Spectrum Analyzer	Agilent	E4446A	AAQ	1/18/2007	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

The antennas to be used with the EUT were tested. The EUT was transmitting and receiving while set at the lowest channel, a middle channel, and the highest channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:1992).

NORTHWEST EMC

Field Strength of Spurious Emissions

PSA 2007.05.07
EMI 2006.4.26

EUT:	PurePoint, NGL	Work Order:	ALCO0063
Serial Number:	Beta 16	Date:	10/29/07
Customer:	Alcon Laboratories, Inc.	Temperature:	24.7C
Attendees:	None	Humidity:	42%
Project:	None	Barometric Pres.:	1012.1 mb
Tested by:	Jaemi Suh	Power: 120VAC/60Hz	Job Site: OC10

TEST SPECIFICATIONS	Test Method
FCC 15.225:2006	ANSI C63.4:2003

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

COMMENTS

Radio turned on Continous via Remote Laptop.

EUT OPERATING MODES

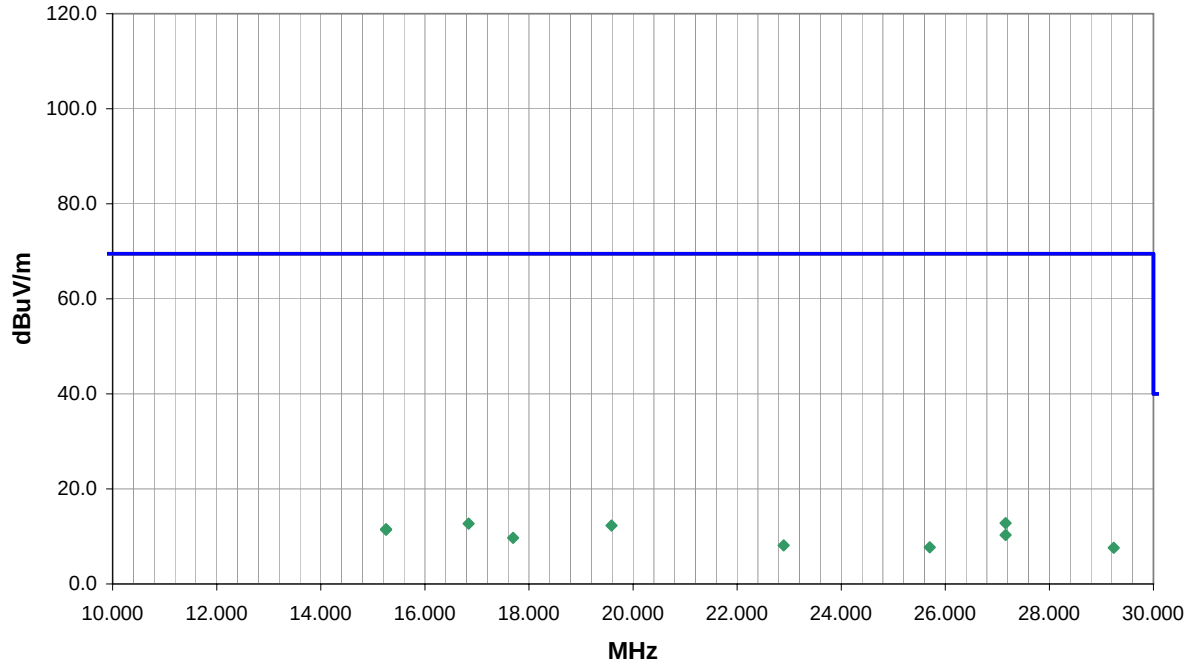
Radio On at 13.56 MHz.

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	2
Configuration #	1
Results	Pass

Signature



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)
27.159	3.8	9.0	131.0	1.0	3.0	0.0	oop/Active I	QP	0.0	12.8	69.5	-56.7
16.840	2.0	10.7	105.0	1.0	3.0	0.0	oop/Active	QP	0.0	12.7	69.5	-56.8
19.588	1.9	10.4	10.0	1.0	3.0	0.0	oop/Active	QP	0.0	12.3	69.5	-57.2
15.253	0.6	10.9	117.0	1.0	3.0	0.0	oop/Active	QP	0.0	11.5	69.5	-58.0
15.253	0.5	10.9	90.0	1.0	3.0	0.0	oop/Active	QP	0.0	11.4	69.5	-58.1
27.160	1.3	9.0	19.0	1.0	3.0	0.0	oop/Active	QP	0.0	10.3	69.5	-59.2
17.696	-1.0	10.7	72.0	1.0	3.0	0.0	oop/Active	QP	0.0	9.7	69.5	-59.8
22.896	-1.7	9.8	298.0	1.0	3.0	0.0	oop/Active	QP	0.0	8.1	69.5	-61.4
25.702	-1.5	9.2	323.0	1.0	3.0	0.0	oop/Active	QP	0.0	7.7	69.5	-61.8
29.238	-0.9	8.5	81.0	1.0	3.0	0.0	oop/Active	QP	0.0	7.6	69.5	-61.9

NORTHWEST EMC

Field Strength of Spurious Emissions

PSA 2007.05.07
EMI 2006.4.26

EUT:	PurePoint, NGL			Work Order:	ALCO0063
Serial Number:	Beta 16			Date:	10/29/07
Customer:	Alcon Laboratories, Inc.			Temperature:	24.7C
Attendees:	None			Humidity:	42%
Project:	None			Barometric Pres.:	1012.1 mb
Tested by:	Jaemi Suh	Power:	120VAC/60Hz	Job Site:	OC10

TEST SPECIFICATIONS	Test Method
FCC 15.225:2006	ANSI C63.4:2003

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

COMMENTS

Radio turned on Continous via Remote Laptop.

EUT OPERATING MODES

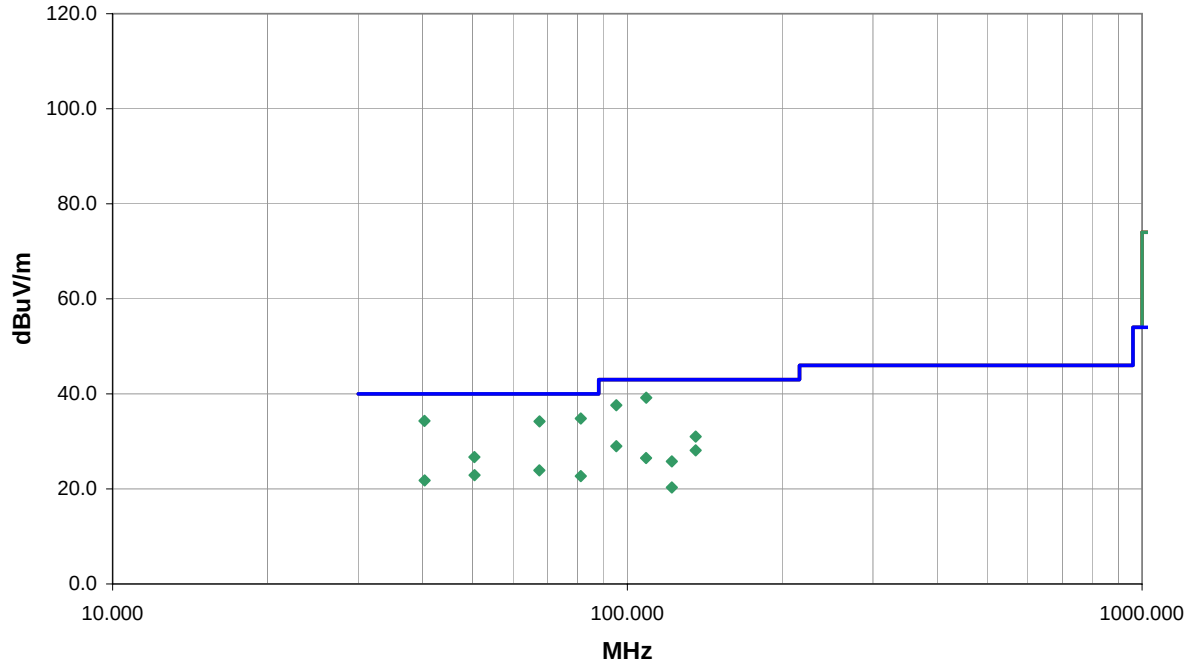
Radio On at 13.56 MHz.

DEVIATIONS FROM TEST STANDARD

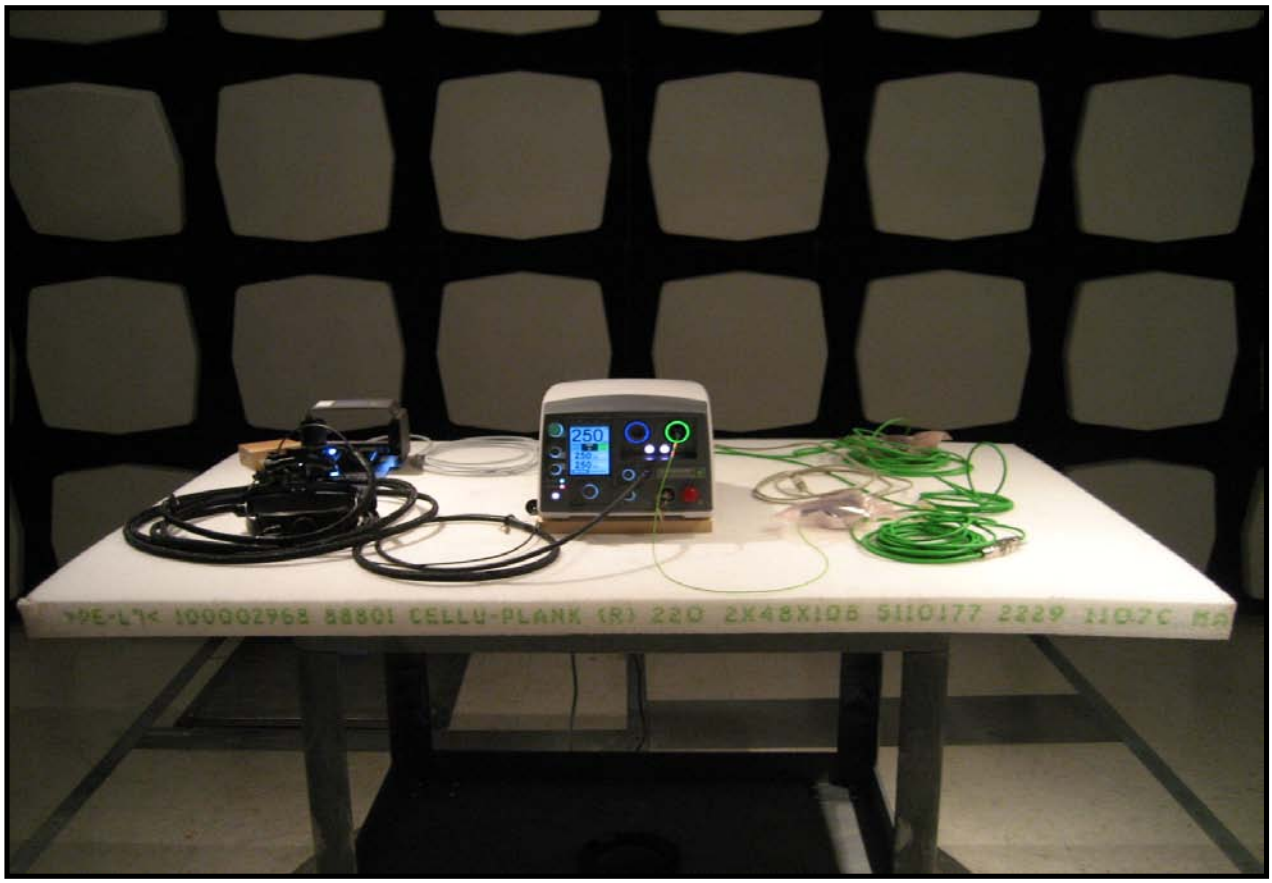
No deviations.

Run #	3
Configuration #	1
Results	Pass

Signature



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)
108.792	45.2	-6.0	126.0	1.0	0.0	0.0	V-Bilog	QP	0.0	39.2	43.0	-3.8
81.207	41.7	-6.9	115.0	1.0	0.0	0.0	V-Bilog	QP	0.0	34.8	40.0	-5.2
95.193	43.4	-5.8	78.0	1.0	0.0	0.0	V-Bilog	QP	0.0	37.6	43.0	-5.4
40.349	36.2	-1.9	69.0	1.0	0.0	0.0	V-Bilog	QP	0.0	34.3	40.0	-5.7
67.487	41.8	-7.6	21.0	1.0	0.0	0.0	V-Bilog	QP	0.0	34.2	40.0	-5.8
135.788	37.7	-6.7	359.0	1.0	0.0	0.0	V-Bilog	QP	0.0	31.0	43.0	-12.0
50.440	32.5	-5.8	156.0	1.0	0.0	0.0	V-Bilog	QP	0.0	26.7	40.0	-13.3
95.203	34.8	-5.8	88.0	3.2	0.0	0.0	H-Bilog	QP	0.0	29.0	43.0	-14.0
135.784	34.8	-6.7	116.0	2.5	0.0	0.0	H-Bilog	QP	0.0	28.1	43.0	-14.9
67.449	31.5	-7.6	336.0	1.0	0.0	0.0	H-Bilog	QP	0.0	23.9	40.0	-16.1
108.772	32.5	-6.0	91.0	3.2	0.0	0.0	H-Bilog	QP	0.0	26.5	43.0	-16.5
50.492	28.7	-5.8	357.0	3.6	0.0	0.0	H-Bilog	QP	0.0	22.9	40.0	-17.1
121.985	32.6	-6.8	72.0	1.0	0.0	0.0	V-Bilog	QP	0.0	25.8	43.0	-17.2
81.220	29.6	-6.9	207.0	2.3	0.0	0.0	H-Bilog	QP	0.0	22.7	40.0	-17.3
40.386	23.8	-2.0	233.0	3.3	0.0	0.0	H-Bilog	QP	0.0	21.8	40.0	-18.2
121.991	27.1	-6.8	159.0	1.7	0.0	0.0	H-Bilog	QP	0.0	20.3	43.0	-22.7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Field Strength of Spurious Emissions