

Alcon LenSx, Inc.

LenSx Laser System

Report No. LENS0005

Report Prepared By



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

Last Date of Test: December 17, 2010

Alcon LenSx, Inc.

Model: LenSx Laser System

| Emissions | | | |
|--------------------------------------|-----------------|------------------|-----------|
| Test Description | Specification | Test Method | Pass/Fail |
| Field Strength of Fundamental | FCC 15.225:2010 | ANSI C63.10:2009 | Pass |
| Field Strength of Spurious Emissions | FCC 15.225:2010 | ANSI C63.10:2009 | Pass |
| Frequency Stability | FCC 15.225:2010 | ANSI C63.10:2009 | Pass |
| Occupied Bandwidth | FCC 15.225:2010 | ANSI C63.10:2009 | Pass |
| AC Powerline Conducted Emissions | FCC 15.207:2010 | ANSI C63.10:2009 | 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 (Site filing #2834B-1).

Approved By:

Tim O'Shea, Operations 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 | | |

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.



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 National Voluntary Laboratory Accreditation Program (NVLAP) for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. NVLAP is administered by the National Institute of Standards and Technology (NIST), an agency of the U.S. Commerce Department. 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.

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-Gen, Issue 2 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. (*Site Filing Numbers - Hillsboro: 2834D-1, 2834D-2, Sultan: 2834C-1, Irvine: 2834B-1, 2834B-2, Brooklyn Park: 2834E-1*)

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.

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).



Accreditations and Authorizations

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, G-84, C-2687, T-1658, and R-2318, Irvine: R-1943, G-85, C-2766, and T-1659, Sultan: R-871, G-83, C-1784, and T-1511, Brooklyn Park: R-3125, G-86, G-141, C-3464, and T-1634).*

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 (US0017).

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

KCC

Northwest EMC, Inc is a CAB designated by MRA partners and recognized by Korea. *(Assigned Lab Numbers: Hillsboro: US0017, Irvine: US0158, Sultan: US0157, Brooklyn Park: US0175)*

VIETNAM

Vietnam MIC has approved Northwest EMC as an accredited test lab. Per Decision No. 194/QD-QLCL (dated December 15, 2009), Northwest EMC test reports can be used for Vietnam approval submissions.

SCOPE

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

<http://www.nwemc.com/accreditations/>



Northwest EMC Locations



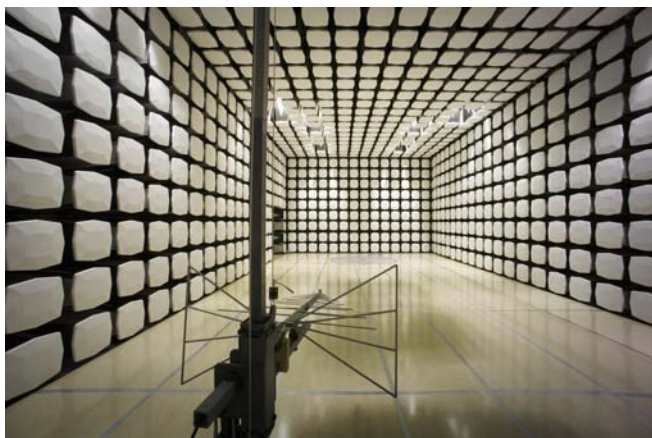
Oregon
Labs EV01-EV12
22975 NW Evergreen Pkwy
Suite 400
Hillsboro, OR 97124
(503) 844-4066

California
Labs OC01-OC13
41 Tesla
Irvine, CA 92618
(949) 861-8918

Minnesota
Labs MN01-MN08
9349 W Broadway Ave.
Brooklyn Park,
MN 55445
(763) 425-2281

Washington
Labs SU01-SU07
14128 339th Ave. SE
Sultan, WA 98294
(360) 793-8675

New York
Labs WA01-WA04
4939 Jordan Rd.
Elbridge, NY 13060
(315) 685-0796



Party Requesting the Test

| | |
|---------------------------------|-----------------------|
| Company Name: | Alcon LenSx, Inc. |
| Address: | 33 Journey |
| City, State, Zip: | Aliso Viejo, CA 92656 |
| Test Requested By: | Scott DeLong |
| Model: | LenSx Laser System |
| First Date of Test: | December 13, 2010 |
| Last Date of Test: | December 17, 2010 |
| Receipt Date of Samples: | December 13, 2010 |
| 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. Less than 0dBm output power

Testing Objective:

RFID radio seeking system approval under FCC 15.225

CONFIGURATION 1 LENS0005**Software/Firmware Running during test**

| Description | Version |
|--------------------------------|----------|
| LenSx Laser System Application | 2.1 |
| Skyetek | 01010679 |

EUT

| Description | Manufacturer | Model/Part Number | Serial Number |
|--------------------|-------------------|--------------------|-----------------|
| LenSx Laser System | Alcon LenSx, Inc. | LenSx Laser System | 0510-X007 |
| RFID Device | Skyetek | M2-MH | PN# SM-M2-HF-LF |

Cables

| Cable Type | Shield | Length (m) | Ferrite | Connection 1 | Connection 2 |
|--|--------|------------|---------|--------------------|--------------|
| AC Cable | Yes | 3.0m | No | LenSx Laser System | AC Mains |
| 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 | 12/13/2010 | AC 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. |
| 2 | 12/13/2010 | 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. |
| 3 | 12/13/2010 | 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. |
| 4 | 12/16/2010 | 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. |
| 5 | 12/17/2010 | Occupied Bandwidth | 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

RFID ON.

POWER SETTINGS INVESTIGATED

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|-----------|----------------|-----------|
| Start Frequency | 13.56 MHz | Stop Frequency | 13.56 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 | N/A | 10kHz-1GHz RE Cables | OCH | 4/1/2010 | 13 |
| Spectrum Analyzer | Agilent | E4446A | AAY | 1/15/2010 | 12 |
| Antenna, Loop | EMCO | 6502 | AZB | 12/6/2010 | 24 |

MEASUREMENT BANDWIDTHS

| Frequency Range | Peak Data | Quasi-Peak Data | Average Data |
|-----------------|-----------|-----------------|--------------|
| (MHz) | (kHz) | (kHz) | (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 |


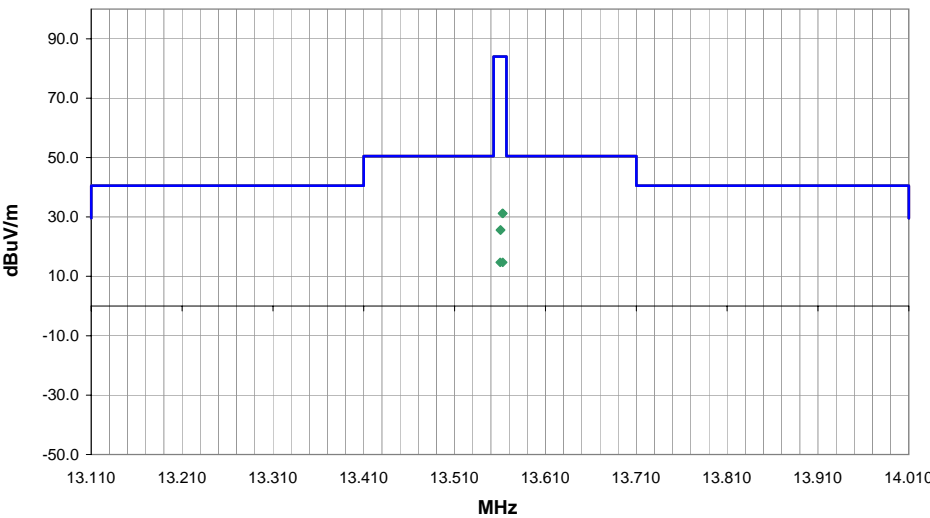
Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. The measurement uncertainty estimation 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 C63.10:2009).

| | | | | | | | | | | | | | |
|--|-------------------------|--------------------------------------|--------------------------|---------------------------------|--------------------------|----------------------------------|-----------------|-----------------|---------------------------------|------------------------|---------------------------|-------------------------------|---|
| NORTHWEST EMC | | FIELD STRENGTH OF FUNDAMENTAL | | PSA 2006.07.21 EMI 2010.9.21 | | | | | | | | | |
| EUT: LenSx Laser System | | | Work Order: LENS0005 | | | | | | | | | | |
| Serial Number: 0510-X007 | | | Date: 12/15/10 | | | | | | | | | | |
| Customer: Alcon LenSx, Inc. | | | Temperature: 29.29 | | | | | | | | | | |
| Attendees: Scott DeLong | | | Humidity: 41% | | | | | | | | | | |
| Project: None | | | Barometric Pres.: 1012.4 | | | | | | | | | | |
| Tested by: Jaemi Suh | | Power: 120VAC/60Hz | | Job Site: OC10 | | | | | | | | | |
| TEST SPECIFICATIONS | | | Test Method | | | | | | | | | | |
| FCC 15.225:2010 | | | ANSI C63.10:2009 | | | | | | | | | | |
| TEST PARAMETERS | | | | | | | | | | | | | |
| Antenna Height(s) (m) | | 1 - 4 | | Test Distance (m) 3 | | | | | | | | | |
| COMMENTS | | | | | | | | | | | | | |
| RFID ON | | | | | | | | | | | | | |
| EUT OPERATING MODES | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | |
| DEVIATIONS FROM TEST STANDARD | | | | | | | | | | | | | |
| No deviations. | | | | | | | | | | | | | |
| Run # | 4 | | | | | | | | | | | | |
| Configuration # | 1 | | | | | | | | | | | | |
| Results | Pass | | | | | | | | | | | | |
| Signature  | | | | | | | | | | | | | |
|  <p>The graph displays the field strength in dBuV/m across a frequency range from 13.110 MHz to 14.010 MHz. A prominent peak is observed at 13.563 MHz, reaching approximately 85 dBuV/m. The baseline level is around 40-50 dBuV/m. Three data points are marked with green diamonds at the peak frequency: one at ~85 dBuV/m, one at ~30 dBuV/m, and one at ~15 dBuV/m.</p> | | | | | | | | | | | | | |
| 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 |
| 13.561 | 85.4 | 10.8 | 28.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 70.6 | 25.6 | 84.0 | -58.4 | 1m. perp to ground parallel to eut. |
| 13.563 | 84.2 | 10.8 | 48.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 63.8 | 31.2 | 84.0 | -52.8 | 1m. parallel to ground and perp to eut. |
| 13.563 | 82.5 | 10.8 | 54.0 | 1.3 | 1.0 | 0.0 | Loop | QP | 78.6 | 14.7 | 84.0 | -69.3 | 1m. ant perp to ground, perp to eut. |
| 13.563 | 63.6 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 43.2 | 31.2 | 84.0 | -52.8 | parallel to ground, perp to eut. |
| 13.560 | 62.6 | 10.8 | 28.0 | 1.5 | 3.0 | 0.0 | Loop | QP | 47.8 | 25.6 | 84.0 | -58.4 | perp to ground, parallel to eut. |
| 13.560 | 57.1 | 10.8 | 54.0 | 1.3 | 3.0 | 0.0 | Loop | QP | 53.2 | 14.7 | 84.0 | -69.3 | perp to ground, perp to eut. |

Distance Adjustment Factor for Fundamental Emissions below 30 MHz

Method: Per 47 CFR 15.31(f)(2), the data was extrapolated based upon a the measured fall-off (at each frequency / polarity).

EUT: LenSx Laser System

S/N: 0510-X007

Date: 12/15/10

Job Number: LENS0005

| Frequency (MHz) | Loop Antenna Polarity | Test Distance (meters) | Adjusted Level (dBuV/m) | Fall-Off from 1 to 3 m (dB) | Extrapolation Factor for Specification Limit (dB / decade) | Test Distance of Spec. Limit (meters) | Distance Adjustment Factor (dB) |
|--------------------|--------------------------|---------------------------|----------------------------|-----------------------------------|--|---|--|
| 13.561 | Perp/Gnd, Par/EUT | 1 | 96.2 | 22.8 | 47.8 | 30.0 | 70.6 |
| 13.561 | Perp/Gnd, Par/EUT | 3 | 73.4 | | | | 47.8 |
| 13.563 | Par/Gnd, Perp/EUT | 1 | 95.0 | 20.6 | 43.2 | 30.0 | 63.8 |
| 13.563 | Par/Gnd, Perp/EUT | 3 | 74.4 | | | | 43.2 |
| 13.563 | Perp/Gnd, Perp/EUT | 1 | 93.3 | 25.4 | 53.2 | 30.0 | 78.6 |
| 13.563 | Perp/Gnd, Perp/EUT | 3 | 67.9 | | | | 53.2 |

| | | | |
|-----------------------------|--|--------------------------|--|
| EUT: LenSx Laser System | | Work Order: LENS0005 | |
| Serial Number: 0510-X007 | | Date: 12/16/10 | |
| Customer: Alcon LenSx, Inc. | | Temperature: 29.29 | |
| Attendees: Scott DeLong | | Humidity: 41% | |
| Project: None | | Barometric Pres.: 1012.4 | |
| Tested by: Jaemi Suh | | Power: 120VAC/60Hz | |
| Job Site: OC10 | | | |

| | |
|---------------------|---------------------------------|
| TEST SPECIFICATIONS | |
| FCC 15.225:2010 | Test Method ANSI C63.10:2009 |

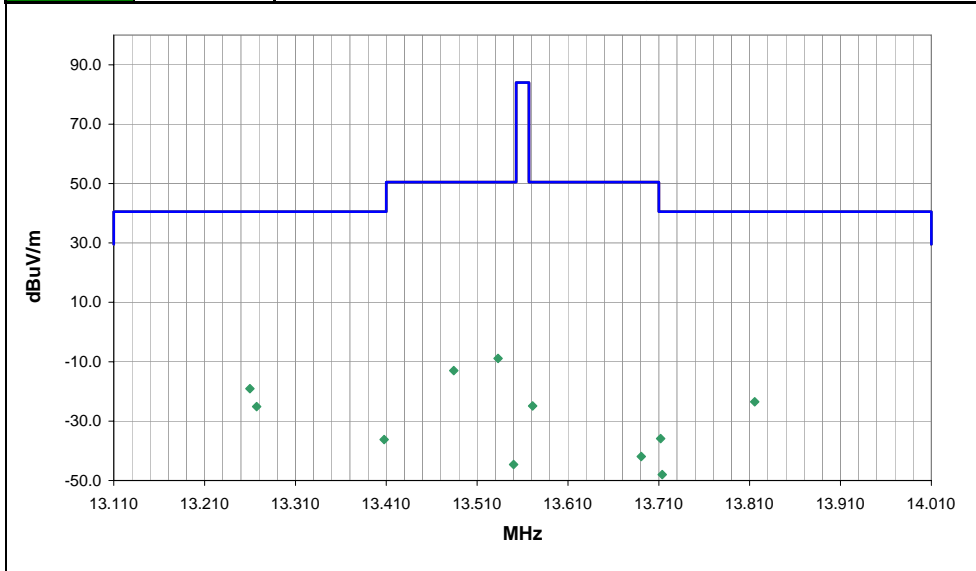
| | | | |
|-----------------------|-------|-------------------|---|
| TEST PARAMETERS | | | |
| Antenna Height(s) (m) | 1 - 4 | Test Distance (m) | 1 |

| | |
|----------|--|
| COMMENTS | |
| RFID ON | |


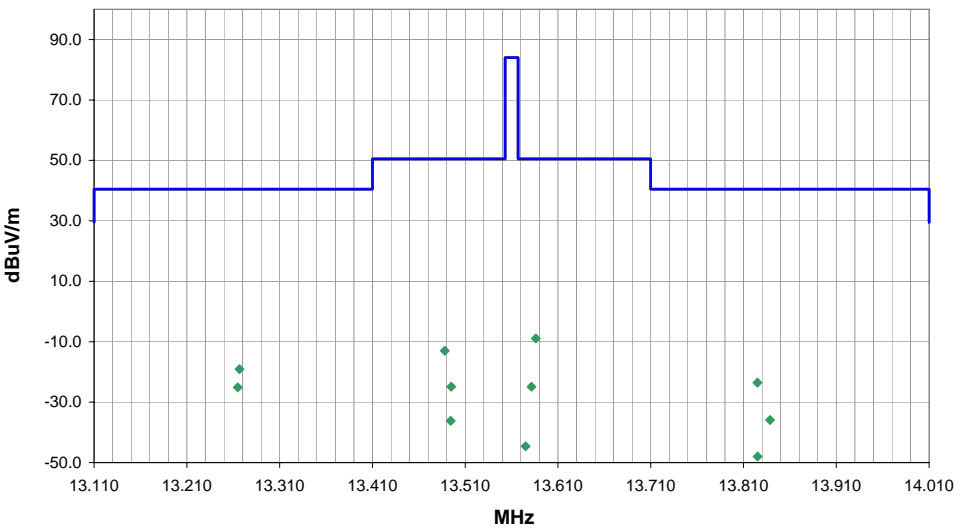
| | |
|---------------------|--|
| EUT OPERATING MODES | |
| None | |

| | |
|-------------------------------|--|
| DEVIATIONS FROM TEST STANDARD | |
| No deviations. | |

| | | |
|-----------------|------|---|
| Run # | 5 | <div style="font-family: cursive; font-size: 2em; color: purple;">[Signature]</div> |
| Configuration # | 1 | |
| Results | Pass | |



| 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 |
|------------|------------------|-------------|-------------------|-----------------|-------------------|---------------------------|----------|----------|--------------------------|-----------------|--------------------|------------------------|--|
| 13.571 | 56.6 | 10.8 | 54.0 | 1.3 | 1.0 | 0.0 | Loop | QP | 92.3 | -24.9 | 50.5 | -75.4 | 1m. ant perp to ground, perp to eut |
| 13.533 | 53.7 | 10.8 | 48.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 73.4 | -8.9 | 50.5 | -59.4 | 1m. ant parallel to ground, perp to eut |
| 13.550 | 53.6 | 10.8 | 29.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 109.0 | -44.6 | 50.5 | -95.1 | 1m. ant perp to ground, parallel to eut. |
| 13.484 | 46.8 | 10.8 | 54.0 | 1.3 | 1.0 | 0.0 | Loop | QP | 70.6 | -13.0 | 50.5 | -63.5 | 1m. ant perp to ground, perp to eut |
| 13.408 | 44.6 | 10.8 | 29.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 91.6 | -36.2 | 40.5 | -76.7 | 1m. ant perp to ground, parallel to eut. |
| 13.691 | 41.7 | 10.8 | 29.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 94.4 | -41.9 | 50.5 | -92.4 | 1m. ant perp to ground, parallel to eut. |
| 13.267 | 40.3 | 10.8 | 48.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 76.2 | -25.1 | 40.5 | -65.6 | 1m. ant parallel to ground, perp to eut |
| 13.712 | 39.4 | 10.8 | 54.0 | 1.3 | 1.0 | 0.0 | Loop | QP | 86.1 | -35.9 | 40.5 | -76.4 | 1m. ant perp to ground, perp to eut. |
| 13.714 | 39.0 | 10.8 | 29.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 97.8 | -48.0 | 40.5 | -88.5 | 1m. ant perp to ground, parallel to eut. |
| 13.260 | 34.5 | 10.8 | 54.0 | 1.3 | 1.0 | 0.0 | Loop | QP | 64.4 | -19.1 | 40.5 | -59.6 | 1m. ant perp to ground, perp to eut |
| 13.816 | 32.9 | 10.8 | 48.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 67.2 | -23.5 | 40.5 | -64.0 | 1m. ant parallel to ground, perp to eut |

| NORTHWEST | | FIELD STRENGTH OF FUNDAMENTAL | | PSA 2008.07.21 EMI 2010.9.21 | | | | | | | | | |
|---|------------------|---|-------------------|---------------------------------|-------------------|---------------------------|----------|----------|--------------------------|-----------------|--------------------|------------------------|--------------------------------------|
| EUT: LenSx Laser System | | Work Order: LENS0005 | | | | | | | | | | | |
| Serial Number: 0510-X007 | | Date: 12/16/10 | | | | | | | | | | | |
| Customer: Alcon LenSx, Inc. | | Temperature: 29.29 | | | | | | | | | | | |
| Attendees: Scott DeLong | | Humidity: 41% | | | | | | | | | | | |
| Project: None | | Barometric Pres.: 1012.4 | | | | | | | | | | | |
| Tested by: Jaemi Suh | | Power: 120VAC/60Hz | | Job Site: OC10 | | | | | | | | | |
| TEST SPECIFICATIONS | | Test Method | | | | | | | | | | | |
| FCC 15.225:2010 | | ANSI C63.10:2009 | | | | | | | | | | | |
| TEST PARAMETERS | | | | | | | | | | | | | |
| Antenna Height(s) (m) | 1 - 4 | Test Distance (m) | 3 | | | | | | | | | | |
| COMMENTS | | | | | | | | | | | | | |
| RFID ON | | | | | | | | | | | | | |
| EUT OPERATING MODES | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | |
| DEVIATIONS FROM TEST STANDARD | | | | | | | | | | | | | |
| No deviations. | | | | | | | | | | | | | |
| Run # | 6 | Signature  | | | | | | | | | | | |
| Configuration # | 1 | | | | | | | | | | | | |
| Results | Pass | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| 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 |
| 13.586 | 30.0 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 49.7 | -8.9 | 40.5 | -49.4 | ant parallel to ground, perp to eut. |
| 13.495 | 26.8 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 62.5 | -24.9 | 40.5 | -65.4 | ant parallel to ground, perp to eut. |
| 13.582 | 26.8 | 10.8 | 55.0 | 1.3 | 3.0 | 0.0 | Loop | QP | 62.5 | -24.9 | 40.5 | -65.4 | ant perp to ground, perp to eut. |
| 13.488 | 24.0 | 10.8 | 55.0 | 1.3 | 3.0 | 0.0 | Loop | QP | 47.8 | -13.0 | 50.5 | -63.5 | ant perp to ground, perp to eut. |
| 13.575 | 18.4 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 73.8 | -44.6 | 50.5 | -95.1 | ant perp to ground, parallel to eut. |
| 13.265 | 15.7 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 51.6 | -25.1 | 40.5 | -65.6 | ant parallel to ground, perp to eut. |
| 13.494 | 15.0 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 62.0 | -36.2 | 50.5 | -86.7 | ant perp to ground, parallel to eut. |
| 13.267 | 13.7 | 10.8 | 55.0 | 1.3 | 3.0 | 0.0 | Loop | QP | 43.6 | -19.1 | 40.5 | -59.6 | ant perp to ground, perp to eut. |
| 13.839 | 11.6 | 10.8 | 55.0 | 1.3 | 3.0 | 0.0 | Loop | QP | 58.3 | -35.9 | 40.5 | -76.4 | ant perp to ground, perp to eut. |
| 13.825 | 11.2 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 45.5 | -23.5 | 40.5 | -64.0 | ant parallel to ground, perp to eut. |
| 13.825 | 7.4 | 10.8 | 48.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 66.2 | -48.0 | 40.5 | -88.5 | ant perp to ground, parallel to eut. |

Distance Adjustment Factor for Spurious Emissions below 30 MHz

Method: Per 47 CFR 15.31(f)(2), the data was extrapolated based upon a the measured fall-off (at each frequency / polarity).

EUT: LenSx Laser System

S/N: 0510-X007

Date: 12/15/10

Job Number: LENS0005

| Frequency (MHz) | Loop Antenna Polarity | Test Distance (meters) | Adjusted Level (dBuV/m) | Fall-Off from 1 to 3 m (dB) | Extrapolation Factor for Specification Limit (dB / decade) | Test Distance of Spec. Limit (meters) | Distance Adjustment Factor (dB) |
|--------------------|--------------------------|---------------------------|----------------------------|-----------------------------------|--|---|--|
| 13.571 | Perp/Gnd, Perp/EUT | 1 | 67.4 | 29.8 | 62.5 | 30.0 | 92.3 |
| 13.571 | Perp/Gnd, Perp/EUT | 3 | 37.6 | | | | 62.5 |
| 13.533 | Par/Gnd, Perp/EUT | 1 | 64.5 | 23.7 | 49.7 | 30.0 | 73.4 |
| 13.533 | Par/Gnd, Perp/EUT | 3 | 40.8 | | | | 49.7 |
| 13.550 | Perp/Gnd, Par/EUT | 1 | 64.4 | 35.2 | 73.8 | 30.0 | 109.0 |
| 13.550 | Perp/Gnd, Par/EUT | 3 | 29.2 | | | | 73.8 |
| 13.484 | Perp/Gnd, Perp/EUT | 1 | 57.6 | 22.8 | 47.8 | 30.0 | 70.6 |
| 13.484 | Perp/Gnd, Perp/EUT | 3 | 34.8 | | | | 47.8 |
| 13.408 | Perp/Gnd, Par/EUT | 1 | 55.4 | 29.6 | 62.0 | 30.0 | 91.6 |
| 13.408 | Perp/Gnd, Par/EUT | 3 | 25.8 | | | | 62.0 |
| 13.691 | Perp/Gnd, Par/EUT | 1 | 52.5 | 30.5 | 63.9 | 30.0 | 94.4 |
| 13.691 | Perp/Gnd, Par/EUT | 3 | 22.0 | | | | 63.9 |
| 13.267 | Par/Gnd, Perp/EUT | 1 | 51.1 | 24.6 | 51.6 | 30.0 | 76.2 |
| 13.267 | Par/Gnd, Perp/EUT | 3 | 26.5 | | | | 51.6 |
| 13.712 | Perp/Gnd, Perp/EUT | 1 | 50.2 | 27.8 | 58.3 | 30.0 | 86.1 |
| 13.712 | Perp/Gnd, Perp/EUT | 3 | 22.4 | | | | 58.3 |
| 13.714 | Perp/Gnd, Par/EUT | 1 | 49.8 | 31.6 | 66.2 | 30.0 | 97.8 |
| 13.714 | Perp/Gnd, Par/EUT | 3 | 18.2 | | | | 66.2 |
| 13.260 | Perp/Gnd, Perp/EUT | 1 | 45.3 | 20.8 | 43.6 | 30.0 | 64.4 |
| 13.260 | Perp/Gnd, Perp/EUT | 3 | 24.5 | | | | 43.6 |
| 13.816 | Par/Gnd, Perp/EUT | 1 | 43.7 | 21.7 | 45.5 | 30.0 | 67.2 |
| 13.816 | Par/Gnd, Perp/EUT | 3 | 22.0 | | | | 45.5 |

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

RFID On.

POWER SETTINGS INVESTIGATED

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|---------|----------------|----------|
| Start Frequency | 150 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 | 12/6/2010 | 24 |
| Antenna, Biconilog | EMCO | 3142 | AXJ | 2/24/2010 | 13 |
| OC10 Cables | N/A | 10kHz-1GHz RE Cables | OCH | 4/1/2010 | 13 |
| Pre-Amplifier | Miteq | AM-1616-1000 | AOM | 4/1/2010 | 13 |
| Spectrum Analyzer | Agilent | E4446A | AAY | 1/15/2010 | 12 |

MEASUREMENT BANDWIDTHS

| Frequency Range | Peak Data | Quasi-Peak Data | Average Data |
|-----------------|-----------|-----------------|--------------|
| (MHz) | (kHz) | (kHz) | (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 |


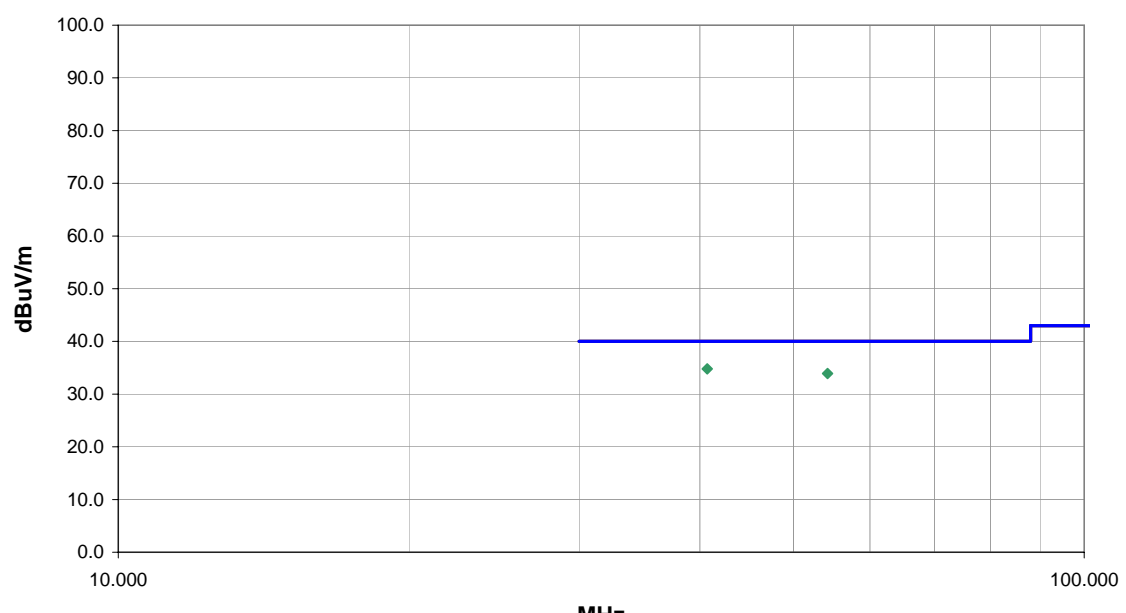
Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. The measurement uncertainty estimation 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 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 C63.10:2009).

| NORTHWEST | | FIELD STRENGTH OF SPURIOUS EMISSIONS | | | | | | | | | | PSA 2008.07.21 EMI 2010.9.21 | |
|---|------------------|--------------------------------------|-------------------|-----------------|-------------------|---------------------------|----------|----------|--------------------------|--------------------------|--------------------|---------------------------------|----------|
| EMC | | | | | | | | | | | | | |
| EUT: LenSx Laser System | | | | | | | | | | Work Order: LENS0005 | | | |
| Serial Number: 0510-X007 | | | | | | | | | | Date: 12/13/10 | | | |
| Customer: Alcon LenSx, Inc. | | | | | | | | | | Temperature: 29.29 | | | |
| Attendees: Scott DeLong | | | | | | | | | | Humidity: 41% | | | |
| Project: None | | | | | | | | | | Barometric Pres.: 1012.4 | | | |
| Tested by: Jaemi Suh | | | | | | | | | | Power: 120VAC/60Hz | | Job Site: OC10 | |
| TEST SPECIFICATIONS | | | | | | | | | | Test Method | | | |
| FCC 15.225:2010 | | | | | | | | | | ANSI C63.10:2009 | | | |
| TEST PARAMETERS | | | | | | | | | | | | | |
| Antenna Height(s) (m) | | 1 - 4 | | | | Test Distance (m) | | 3 | | | | | |
| COMMENTS | | | | | | | | | | | | | |
| RFID ON. | | | | | | | | | | | | | |
| EUT OPERATING MODES | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | |
| 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 |
| 40.721 | 37.1 | -2.3 | 71.0 | 2.6 | 3.0 | 0.0 | H-Bilog | QP | 0.0 | 34.8 | 40.0 | -5.2 | |
| 54.236 | 40.3 | -6.4 | 356.0 | 1.0 | 3.0 | 0.0 | H-Bilog | QP | 0.0 | 33.9 | 40.0 | -6.1 | |

| NORTHWEST EMC | | FIELD STRENGTH OF SPURIOUS EMISSIONS | | | | PSA 2008.07.21 EMI 2010.9.21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|---|-------------------|--------------------|-------------------|---------------------------------|----------|----------|--------------------------|-----------------|--------------------|------------------------|--|------------------|-------------|-------------------|-----------------|-------------------|---------------------------|----------|----------|--------------------------|-----------------|--------------------|------------------------|----------|--------|------|-----|------|-----|-----|-----|------|----|------|------|------|-------|--------------------------------------|--------|------|-----|-------|-----|-----|-----|------|----|------|------|------|------|--|--------|------|-----|-------|-----|-----|-----|------|----|------|-----|------|-------|--|--------|------|-----|-------|-----|-----|-----|------|----|-----|------|------|------|------------------------------------|--------|------|-----|------|-----|-----|-----|------|----|------|------|------|-------|---------------------------------|--------|------|-----|------|-----|-----|-----|------|----|------|-----|------|-------|---|
| EUT: LenSx Laser System | | | | | | Work Order: LENS0005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Serial Number: 0510-X007 | | | | | | Date: 12/13/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer: Alcon LenSx, Inc. | | | | | | Temperature: 29.29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attendees: Scott DeLong | | | | | | Humidity: 41% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project: None | | | | | | Barometric Pres.: 1012.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tested by: Jaemi Suh | | | | Power: 120VAC/60Hz | | Job Site: OC10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TEST SPECIFICATIONS | | | | | | Test Method | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FCC 15.225:2010 | | | | | | ANSI C63.10:2009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TEST PARAMETERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antenna Height(s) (m) | | 1 - 4 | | Test Distance (m) | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMMENTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RFID ON. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EUT OPERATING MODES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEVIATIONS FROM TEST STANDARD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No deviations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Run # | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Configuration # | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Results | | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Freq (MHz)</th> <th>Amplitude (dBuV)</th> <th>Factor (dB)</th> <th>Azimuth (degrees)</th> <th>Height (meters)</th> <th>Distance (meters)</th> <th>External Attenuation (dB)</th> <th>Polarity</th> <th>Detector</th> <th>Distance Adjustment (dB)</th> <th>Adjusted dBuV/m</th> <th>Spec. Limit dBuV/m</th> <th>Compared to Spec. (dB)</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>27.095</td> <td>28.0</td> <td>8.9</td> <td>88.0</td> <td>1.5</td> <td>1.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>39.3</td> <td>-2.4</td> <td>29.5</td> <td>-31.9</td> <td>1m. Ant Perp to ground, perp to EUT.</td> </tr> <tr> <td>27.164</td> <td>25.9</td> <td>8.9</td> <td>108.0</td> <td>1.0</td> <td>1.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>10.5</td> <td>24.3</td> <td>29.5</td> <td>-5.2</td> <td>1m. Ant parallel to grnd, perp to EUT.</td> </tr> <tr> <td>27.120</td> <td>22.8</td> <td>8.9</td> <td>167.0</td> <td>1.7</td> <td>1.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>27.6</td> <td>4.1</td> <td>29.5</td> <td>-25.4</td> <td>1m. Ant parallel to ground, parallel to eut.</td> </tr> <tr> <td>27.105</td> <td>22.5</td> <td>8.9</td> <td>123.0</td> <td>1.0</td> <td>3.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>7.1</td> <td>24.3</td> <td>29.5</td> <td>-5.2</td> <td>Ant parrallel to grnd, perp to eut</td> </tr> <tr> <td>27.195</td> <td>15.3</td> <td>8.9</td> <td>32.0</td> <td>1.0</td> <td>3.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>26.6</td> <td>-2.4</td> <td>29.5</td> <td>-31.9</td> <td>Ant perp to ground, perp to EUT</td> </tr> <tr> <td>27.104</td> <td>13.9</td> <td>8.9</td> <td>99.0</td> <td>2.1</td> <td>3.0</td> <td>0.0</td> <td>Loop</td> <td>QP</td> <td>18.7</td> <td>4.1</td> <td>29.5</td> <td>-25.4</td> <td>Ant parallel to ground, parallel to eut</td> </tr> </tbody> </table> | | | | | | | | | | | | | 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 | 27.095 | 28.0 | 8.9 | 88.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 39.3 | -2.4 | 29.5 | -31.9 | 1m. Ant Perp to ground, perp to EUT. | 27.164 | 25.9 | 8.9 | 108.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 10.5 | 24.3 | 29.5 | -5.2 | 1m. Ant parallel to grnd, perp to EUT. | 27.120 | 22.8 | 8.9 | 167.0 | 1.7 | 1.0 | 0.0 | Loop | QP | 27.6 | 4.1 | 29.5 | -25.4 | 1m. Ant parallel to ground, parallel to eut. | 27.105 | 22.5 | 8.9 | 123.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 7.1 | 24.3 | 29.5 | -5.2 | Ant parrallel to grnd, perp to eut | 27.195 | 15.3 | 8.9 | 32.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 26.6 | -2.4 | 29.5 | -31.9 | Ant perp to ground, perp to EUT | 27.104 | 13.9 | 8.9 | 99.0 | 2.1 | 3.0 | 0.0 | Loop | QP | 18.7 | 4.1 | 29.5 | -25.4 | Ant parallel to ground, parallel to eut |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.095 | 28.0 | 8.9 | 88.0 | 1.5 | 1.0 | 0.0 | Loop | QP | 39.3 | -2.4 | 29.5 | -31.9 | 1m. Ant Perp to ground, perp to EUT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.164 | 25.9 | 8.9 | 108.0 | 1.0 | 1.0 | 0.0 | Loop | QP | 10.5 | 24.3 | 29.5 | -5.2 | 1m. Ant parallel to grnd, perp to EUT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.120 | 22.8 | 8.9 | 167.0 | 1.7 | 1.0 | 0.0 | Loop | QP | 27.6 | 4.1 | 29.5 | -25.4 | 1m. Ant parallel to ground, parallel to eut. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.105 | 22.5 | 8.9 | 123.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 7.1 | 24.3 | 29.5 | -5.2 | Ant parrallel to grnd, perp to eut | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.195 | 15.3 | 8.9 | 32.0 | 1.0 | 3.0 | 0.0 | Loop | QP | 26.6 | -2.4 | 29.5 | -31.9 | Ant perp to ground, perp to EUT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.104 | 13.9 | 8.9 | 99.0 | 2.1 | 3.0 | 0.0 | Loop | QP | 18.7 | 4.1 | 29.5 | -25.4 | Ant parallel to ground, parallel to eut | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Distance Adjustment Factor for Spurious Radiated Emissions below 30 MHz

Method: Per 47 CFR 15.31(f)(2), the data was extrapolated based upon a the measured fall-off (at each frequency / polarity).

EUT: LenSx Laser System

S/N: 0510-X007

Date: 12/13/10

Job Number: LENS0005

| Frequency (MHz) | Loop Antenna Polarity | Test Distance (meters) | Adjusted Level (dBuV/m) | Fall-Off from 1 to 3 m (dB) | Extrapolation Factor for Specification Limit (dB / decade) | Test Distance of Spec. Limit (meters) | Distance Adjustment Factor (dB) |
|--------------------|--------------------------|---------------------------|----------------------------|-----------------------------------|--|---|--|
| 27.095 | Perp/Gnd, Perp/EUT | 1 | 36.9 | 12.7 | 26.6 | 30.0 | 39.3 |
| 27.095 | Perp/Gnd, Perp/EUT | 3 | 24.2 | | | | 26.6 |
| 27.164 | Par/Gnd, Perp/EUT | 1 | 34.8 | 3.4 | 7.1 | 30.0 | 10.5 |
| 27.164 | Par/Gnd, Perp/EUT | 3 | 31.4 | | | | 7.1 |
| 27.120 | Par/Gnd, Par/EUT | 1 | 31.7 | 8.9 | 18.7 | 30.0 | 27.6 |
| 27.120 | Par/Gnd, Par/EUT | 3 | 22.8 | | | | 18.7 |

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 |
| Chamber, Temperature/Humidity | Cincinnati Sub Zero (CSZ) | ZPHS-32-3.5-SCT/AC | TBE | 6/8/2010 | 24 |
| Spectrum Analyzer | Agilent | E4440A | AFA | 2/9/2010 | 12 |
| Programmable Power Supply | Hewlett-Packard | 6843A | THB | 10/2/2009 | 16 |

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.

EMC

Frequency Stability

| | | | |
|---------------------------------|---|---|-----------------|
| EUT: LenSx Laser System | | Work Order: LENS0005 | |
| Serial Number: 0702723711 | | Date: 12/13/10 | |
| Customer: Alcon LenSx, Inc. | | Temperature: 23 | |
| Attendees: Scott DeLong | | Humidity: 36% | |
| Project: None | | Barometric Pres.: 1016.3 mb | |
| Tested by: Jaemi Suh | | Power: 120VAC/60Hz | Job Site: OC13 |
| TEST SPECIFICATIONS | | | |
| FCC 15.225:2010 | | Test Method ANSI C63.4:2003 | |
| COMMENTS | | | |
| RFID ON. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| No Deviations | | | |
| Configuration # | 1 | Signature  | |
| | | Value | Limit |
| Temperature Frequency Stability | | View Table | 0.01% = 100 ppm |
| Voltage Frequency Stability | | View Table | 0.01% = 100 ppm |
| | | | Results |
| | | | Pass |
| | | | Pass |

Frequency Stability

Temperature Frequency Stability

Result: Pass**Value:** View 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 | 13.560322 | 23.75 | 100 |
| 40 | 13.560000 | 13.560339 | 25.00 | 100 |
| 30 | 13.560000 | 13.560355 | 26.18 | 100 |
| 20 | 13.560000 | 13.560355 | 26.18 | 100 |
| 10 | 13.560000 | 13.560239 | 17.63 | 100 |
| 0 | 13.560000 | 13.560255 | 18.81 | 100 |
| -10 | 13.560000 | 13.560272 | 20.06 | 100 |
| -20 | 13.560000 | 13.560239 | 17.63 | 100 |

Voltage Frequency Stability

Result: Pass**Value:** View 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 | 13.560572 | 42.18 | 100 |
| 132.0 | 13.560000 | 13.560555 | 40.93 | 100 |
| 126.0 | 13.560000 | 13.560532 | 39.23 | 100 |
| 120.0 | 13.560000 | 13.560508 | 37.46 | 100 |
| 114.0 | 13.560000 | 13.560508 | 37.46 | 100 |
| 108.0 | 13.560000 | 13.560528 | 38.94 | 100 |
| 102.0 | 13.560000 | 13.560522 | 38.50 | 100 |

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 |
|-------------------|--------------|--------|-----|------------|----------|
| Signal Generator | Agilent | E8257D | TGU | 12/20/2008 | 24 |
| Spectrum Analyzer | Agilent | E4440A | AFA | 2/9/2010 | 12 |

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION


The occupied bandwidth was measured utilizing the analyzer's peak detector and measuring the carrier's 20 dB occupied bandwidth.

The antenna is integral to the EUT, so a measurement was made with a probe configuration. The resolution bandwidth was >1% of the 20dB bandwidth and the video bandwidth was greater than the resolution bandwidth.

The occupied bandwidth was measured with the EUT configured for continuous modulated operation of the operational band.

EMC

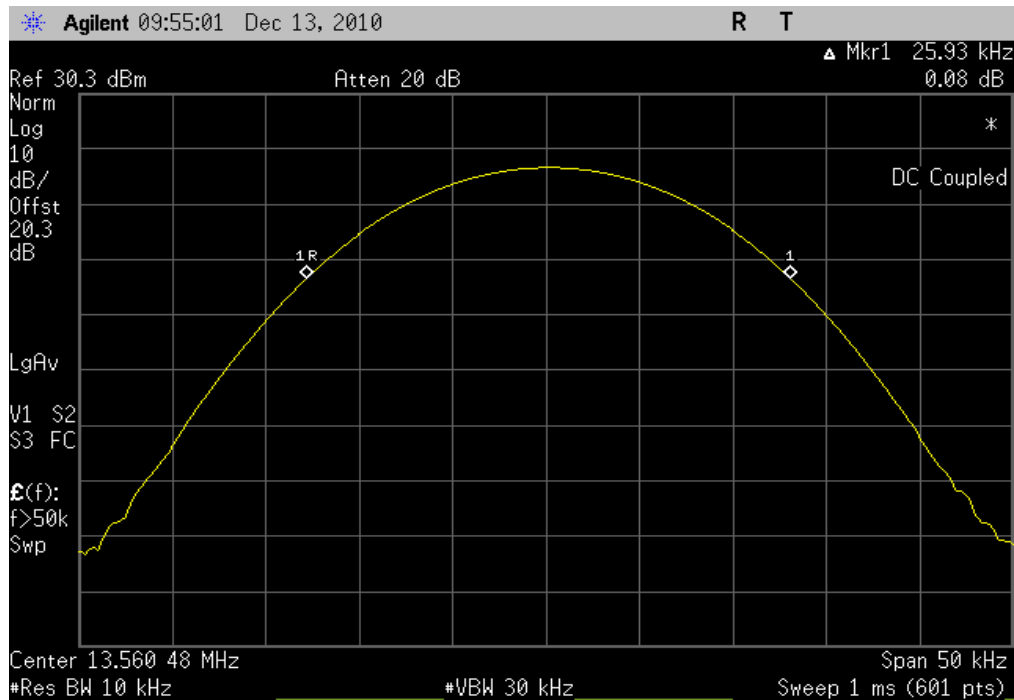
OCCUPIED BANDWIDTH

| | | | |
|-------------------------------|---|---|----------------|
| EUT: LenSx Laser System | | Work Order: LENS0005 | |
| Serial Number: 0510-X007 | | Date: 12/17/10 | |
| Customer: Alcon LenSx, Inc. | | Temperature: 29.29°C | |
| Attendees: Scott DeLong | | Humidity: 41% | |
| Project: None | | Barometric Pres.: 1012.4 | |
| Tested by: Jaemi Suh | | Power: 120VAC/60Hz | Job Site: OC11 |
| TEST SPECIFICATIONS | | Test Method | |
| FCC 15.225:2010 | | ANSI C63.10:2009 | |
| COMMENTS | | | |
| None | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| No Deviations | | | |
| Configuration # | 1 | Signature  | |
| | | Value | Limit |
| OCCUPIED BANDWIDTH | | 25.93 kHz | ≤ 500 kHz |
| | | | Results |
| | | | Pass |

OCCUPIED BANDWIDTH

Result: Pass

Value: 25.93 kHz

Limit: ≤ 500 kHz

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

RFID ON.

POWER SETTINGS INVESTIGATED

120VAC/60Hz

CONFIGURATIONS INVESTIGATED

LENS0005 - 1

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 | LIB | 5/5/2010 | 12 mo |
| Attenuator | Pasternack | 6N10W-20 | AWC | 1/27/2010 | 13 mo |
| High Pass Filter | TTE | H97-100K-50-720B | HFP | 3/8/2010 | 13 mo |
| OC06 Cables | N/A | CE Cables | OCM | 3/8/2010 | 13 mo |
| Receiver | Rohde & Schwarz | ESCI | ARG | 3/15/2010 | 12 mo |

MEASUREMENT BANDWIDTHS

| Frequency Range | Peak Data | Quasi-Peak Data | Average Data |
|-----------------|-----------|-----------------|--------------|
| (MHz) | (kHz) | (kHz) | (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

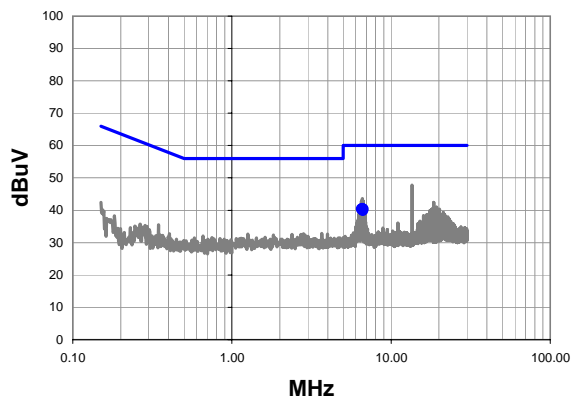
A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

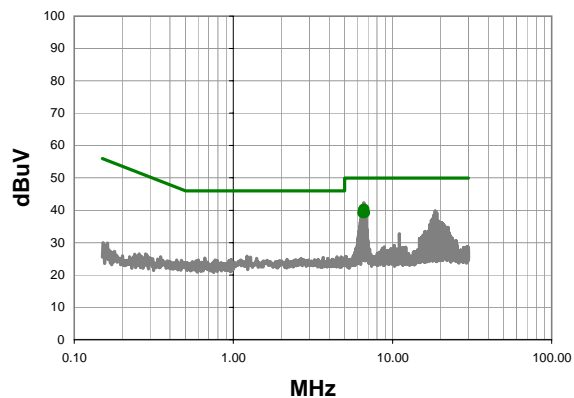
Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 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 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm.

| | | | | | | | |
|---|--------------------|--------------------------|--|---|----|----------------|------|
| Work Order: | LENS0005 | Date: | 12/13/10 |  | | | |
| Project: | None | Temperature: | 22.31 | | | | |
| Job Site: | OC06 | Humidity: | 41.7 | | | | |
| Serial Number: | 0510-X007 | Barometric Pres.: | 1012.2 mb | | | | |
| | | | | Tested by: Jaemi Suh | | | |
| EUT: | LenSx Laser System | | | | | | |
| Configuration: | 1 | | | | | | |
| Customer: | Alcon LenSx, Inc. | | | | | | |
| Attendees: | Scott DeLong | | | | | | |
| EUT Power: | 120VAC/60Hz | | | | | | |
| Operating Mode: | RFID ON. | | | | | | |
| Deviations: | None | | | | | | |
| Comments: | None | | | | | | |
| Test Specifications FCC 15.207:2010 | | | Test Method ANSI C63.10:2009 | | | | |
| Run # | 1 | Line: | High Line | Ext. Attenuation: | 20 | Results | Pass |

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit




Quasi Peak Data - vs - Quasi Peak Limit

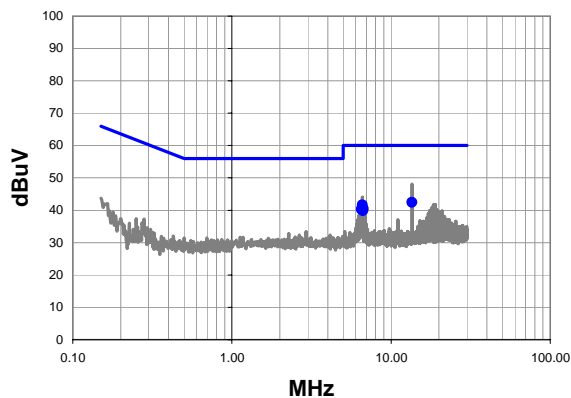
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
|------------|------------------|-------------|-----------------|--------------------|------------------------|
| 6.608 | 20.2 | 20.4 | 40.6 | 60.0 | -19.4 |
| 6.640 | 20.1 | 20.4 | 40.5 | 60.0 | -19.5 |
| 6.704 | 20.0 | 20.4 | 40.4 | 60.0 | -19.6 |
| 6.506 | 20.0 | 20.4 | 40.4 | 60.0 | -19.6 |
| 6.574 | 19.8 | 20.4 | 40.2 | 60.0 | -19.8 |
| 6.674 | 19.5 | 20.4 | 39.9 | 60.0 | -20.1 |

Average Data - vs - Average Limit

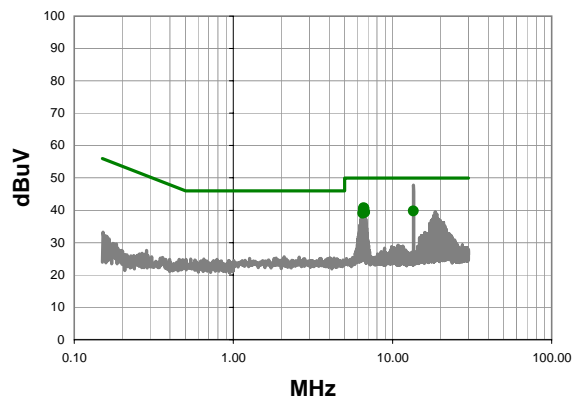
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
|------------|------------------|-------------|-----------------|--------------------|------------------------|
| 6.640 | 20.0 | 20.4 | 40.4 | 50.0 | -9.6 |
| 6.574 | 19.7 | 20.4 | 40.1 | 50.0 | -9.9 |
| 6.608 | 19.2 | 20.4 | 39.6 | 50.0 | -10.4 |
| 6.674 | 18.9 | 20.4 | 39.3 | 50.0 | -10.7 |
| 6.704 | 18.8 | 20.4 | 39.2 | 50.0 | -10.8 |
| 6.506 | 18.8 | 20.4 | 39.2 | 50.0 | -10.8 |

| | | | | | | | |
|---|-------------------|-----------------------------|--|---|----|----------------|------|
| Work Order: | LENS0005 | Date: | 12/13/10 |  | | | |
| Project: | None | Temperature: | 22.31 | | | | |
| Job Site: | OC06 | Humidity: | 41.7 | | | | |
| Serial Number: | 0510-X007 | Barometric Pres.: | 1012.2 mb | | | | |
| EUT: LenSx Laser System | | Tested by: Jaemi Suh | | | | | |
| Configuration: | Unknown | | | | | | |
| Customer: | Alcon LenSx, Inc. | | | | | | |
| Attendees: | Scott DeLong | | | | | | |
| EUT Power: | 120VAC/60Hz | | | | | | |
| Operating Mode: | RFID ON. | | | | | | |
| Deviations: | None | | | | | | |
| Comments: | None | | | | | | |
| Test Specifications FCC 15.207:2010 | | | Test Method ANSI C63.10:2009 | | | | |
| Run # | 2 | Line: | Neutral | Ext. Attenuation: | 20 | Results | Pass |

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



| Quasi Peak Data - vs - Quasi Peak Limit | | | | | | Average Data - vs - Average Limit | | | | | |
|---|------------------|-------------|-----------------|--------------------|------------------------|-----------------------------------|------------------|-------------|-----------------|--------------------|------------------------|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
| 13.560 | 21.5 | 20.9 | 42.4 | 60.0 | -17.6 | 6.606 | 20.4 | 20.4 | 40.8 | 50.0 | -9.2 |
| 6.606 | 21.3 | 20.4 | 41.7 | 60.0 | -18.3 | 6.640 | 20.1 | 20.4 | 40.5 | 50.0 | -9.5 |
| 6.640 | 20.2 | 20.4 | 40.6 | 60.0 | -19.4 | 6.574 | 20.0 | 20.4 | 40.4 | 50.0 | -9.6 |
| 6.704 | 20.1 | 20.4 | 40.5 | 60.0 | -19.5 | 13.560 | 18.8 | 20.9 | 39.7 | 50.0 | -10.3 |
| 6.574 | 20.1 | 20.4 | 40.5 | 60.0 | -19.5 | 6.704 | 19.0 | 20.4 | 39.4 | 50.0 | -10.6 |
| 6.508 | 19.9 | 20.4 | 40.3 | 60.0 | -19.7 | 6.674 | 19.0 | 20.4 | 39.4 | 50.0 | -10.6 |
| 6.674 | 19.5 | 20.4 | 39.9 | 60.0 | -20.1 | 6.508 | 18.7 | 20.4 | 39.1 | 50.0 | -10.9 |