



Quotation

3660 N. Laughlin Road,
Santa Rosa, CA, 95403-1027
Phone (707) 284-1040 Fax (707) 636-0215

The following number must appear on all related
correspondence, shipping papers, and invoices
QUOTE NUMBER: Q210-3158 REV2

ATTENTION:
HHMI
(or Affiliations)

ALLUXA CONTACT:
Amber Czajkowski
Product Line Manager
3660 N. Laughlin Road
Santa Rosa, CA 95403
amber@alluxa.com

QUOTE DATE	REQUISITIONER	SHIPPED VIA	F.O.B. POINT	TERMS
January 2016		Customer account	Santa Rosa	Net 30

Please Refer to Quote Matrix on Following Page.

QTY	UNIT	DESCRIPTION	UNIT PRICE (USD)	TOTAL (USD)
5 10	Filters	<p>45° ± 9.5° AOI, 750 SP Dichroic 70mm x 99mm (±0.2mm) on 6mm Fused Silica FLAT substrate</p> <p>For Random Polarization: Tave > 93% from 500 – 680 nm Tave > 80% from 400 – 720 nm</p> <p>Rabs > 90% from 880 – 1100 nm (P-polarization, Best effort over 45 ± 6.7°) Rabs > 96% from 880 – 1100 nm (S-polarization, Best effort over 45 ± 6.7°) AR coating: Rave < 1% from 400 – 720nm at 45° ± 9.5°</p> <p>Group delay dispersion (GDD) for reflection: GDD < 1500 fs² (880-1100 nm) S-Pol. GDD < 2000 fs² (880-1100 nm) P-Pol. Difference between S&P < 500 fs² (880-1100nm)</p> <p>Spectral (%T and %R) and GDD performance are best effort to meet "SP 750 with GDD v3" document; approved by HHMI</p> <p>Flatness: < 0.5um P-V Power and < 0.1 um P-V Irregularity over 56mm x 79mm ellipse* (Target flatness < 0.27um in Power and Irregularity < 0.07)</p> <p>Parallelism < 1 arc min CA > 90% 60/40 Scratch/Dig</p> <p>Alluxa spec # 2870</p>	3150.00 2800.00	15,750 28,000

Notes/Exceptions:

Lead Time: 6-7 weeks for delivery

Quote valid for 90 days

*Flatness measured @ 0° AOI, 632.8nm

SUBTOTAL

N/A

Peter Egerton

Authorized by

 January 21st, 2016

Date

Alluxa Conditions and Terms of Sale

1. **PRODUCTS:** "Products" shall mean any products or services identified on (a) any of ALLUXA's proposals, quotations or order acknowledgements, (b) current applicable catalogs or price lists, or (c) any of ALLUXA's invoices.
2. **ORDERS:** Customer shall purchase Products by issuing a written purchase order signed by an authorized representative, indicating specific Products, quantity, price, total purchase price, shipping instructions, acceptance test procedures, requested delivery dates, bill-to and ship-to addresses, tax exempt certifications, if applicable, and any other special instructions. All orders are subject to acceptance by ALLUXA.
3. **PRICES:** All prices are (a) firm for thirty (30) days from the date of quotation, (b) FOB ALLUXA factory and (c) exclusive of taxes, insurance, brokerage fees, transportation or special packaging ("Charges"). Title to Products shall pass from ALLUXA to Customer upon delivery to the shipping carrier at the FOB point. Duties, value added and withholding taxes are the responsibility of the Customer, and if paid by ALLUXA shall be charged to Customer as a separate item on the
4. **TERMS OF PAYMENT:** Upon credit approval by ALLUXA, payment terms shall be net thirty (30) days from the date of the shipment or other negotiated terms. ALLUXA reserves the right to require alternative payment terms including, letter of credit or payment in advance.
5. **PERFORMANCE AND SHIPPING:** Shipping dates specified or communicated by ALLUXA to the Customer are based on average lead times. Failure to perform or ship on such dates shall not be considered a breach by ALLUXA. Safety stock agreements are recommended to insure uninterrupted delivery; contact ALLUXA for additional information. All claims for shortage of Products ordered or for incorrect charges must be presented to ALLUXA within ten (10) days after receipt by Customer of the particular shipment of Products. Customer shall be responsible for all shipping Charges. Unless given written instruction, ALLUXA shall select the carrier.
6. **CANCELLATION:** The Customer may not cancel, terminate, suspend performance of, or issue a hold on, any Customer order, without the prior written consent of ALLUXA. Consent, if given, shall be upon terms that will compensate ALLUXA for any loss, including, but not limited to, any work in process or services performed. Blanket orders terminated prior to fulfillment of the order shall be invoiced at the quantity discount for the actual quantity delivered (bill back); finished goods allocated to the blanket order will be invoiced at the price set forth in the blanket order. Custom or unique product will be invoiced to recover ALLUXA's material, labor, overhead, SG&A and profit for work in process. Finished goods will be invoiced at the contract price.
7. **QUANTITY:** ALLUXA endeavors to use its reasonable best efforts to produce and ship the quoted quantity. Because product is customized for customer use, rarely there are unavoidable variations in usable output from run to run. ALLUXA reserves the right to consider a purchase order complete once a substantial portion of the quantity ordered is shipped. In that event, ALLUXA will honor unit pricing based on the original purchase order quantity.
8. **MEASUREMENT and INSPECTION:** ALLUXA provides the highest level of optical measurement and inspection support and coverage to ensure product compliance with specifications. In some cases a combination of best known measurement techniques will be used, where appropriate, to determine product compliance in areas such as high density optical blocking or steep edge filters where a single technique is not sufficient. Unless specific measurement criteria are determined in writing prior to the purchase order, measurements of blocking greater than 5.5 OD will be met by design if the relevant measurement data supports such a conclusion. Where measurements are not capable of verifying the specifications, ALLUXA will apply best known methods along with theoretical information about the product to determine the best estimate of performance / compliance with the product specification. Measurement of filter performance at angle will be verified by theoretical offset from measured data at zero degrees and / or nominal angle unless otherwise agreed to in writing at time of purchase order. Wavelength measurements to be performed on fully calibrated Agilent / Cary 5000 or 6000i spectrophotometers. The results of these measurements will be used to disposition wavelength based specifications unless otherwise agreed to in writing at time of purchase order. During MIL standard surface quality inspections, Alluxa will refer to the procedures and techniques defined in the ANSI OP1.002 as the governing standard.
9. **LIMITED PRODUCT WARRANTY:** ALLUXA's obligations to the Customer for any Product made by ALLUXA are to repair returned Product, provide a replacement Product, or issue a credit note for any defective Product returned to ALLUXA under the RGA procedure (as defined below), on or before one year from the date of original shipment of the Product. The warranty does not cover any Product which has been accidentally damaged in applications which exceed the Product specifications. ALLUXA warrants that services will be performed in a good and workmanlike manner in accordance with standards reasonably applicable to the services, and will re-perform



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any services which ALLUXA determines are not in compliance with this warranty which Customer brings to ALLUXA's attention, in writing, on or before ninety (90) days immediately following completion of the applicable service.

10. RETURN GOODS AUTHORIZATION PROCEDURES: ALLUXA will only accept Products returned under the ALLUXA Return Goods Authorization process ("RGA"). The Customer shall obtain an RGA number from ALLUXA prior to returning any Product and return the Product, including an itemized statement of defect(s), prepaid and insured to ALLUXA to the FOB point. Any Product which has been returned to ALLUXA but which is found to meet the applicable specification for the Product and not defective in workmanship and material shall be subject to ALLUXA's standard examination charge. ALLUXA assumes no liability for customer furnished material.

11. LIMITATION OF LIABILITY: Except for the warranties stated herein, the customer's sole and exclusive remedy is expressly limited to the terms of the agreement. ALLUXA shall not be liable to the customer for any other costs or damages.

12. EXPORT RESTRICTIONS: Customer shall obtain all licenses, permits and approvals required by any government. Customer shall not transmit, export or re-export, directly or indirectly, separately or as part of any system, the Products or any technical data (including processes and services) received from ALLUXA, without first obtaining any license required by the applicable government, including, without limitation, the United States Government and/or any other applicable competent authority. Customer also certifies that none of the products or technical data supplied by ALLUXA under this Agreement will be sold or otherwise transferred to, or made available for use by or for, any entity that is engaged in the design, development, production or use of nuclear, biological or chemical weapons or missile technology.

13. RIGHTS IN INTELLECTUAL PROPERTY: All right, title and interest in and to any inventions, discoveries, improvements, methods, ideas, and other and related documentation, or other forms of intellectual property, which are made, created, developed, written, conceived or first reduced to practice by ALLUXA solely, jointly or on its behalf, in the course of, arising out of, or as a result of ALLUXA's work performed under an order, shall belong to and be the sole and exclusive property of ALLUXA. Customer agrees not to reverse engineer all or any portion of any Product nor allow or assist others to do so.

14. GENERAL TERMS:

14.1 The validity, interpretation and performance of this Agreement shall be governed by and construed under the applicable laws of the State of California and the United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of laws. ALLUXA and Customer hereby irrevocably and unconditionally submit to the jurisdiction of the courts of the State of California and all courts competent to hear appeal there from.

14.2 ALLUXA shall not be liable for any delay or failure in performance whatsoever due to acts of God, earthquakes, shortage of supplies beyond the control of ALLUXA, transportation difficulties, labor disputes, riots, war, fire, explosion, epidemics, or other occurrences beyond ALLUXA's reasonable control or due to unforeseen circumstances.

14.3 Waiver by ALLUXA of any provision herein must be in writing and shall not be deemed to be a waiver of such provision in the future or of any other provision.

14.4 Customer shall hold confidential and shall not use, disclose or permit others to use any confidential information identified as such in writing or orally by ALLUXA or information which Customer knows or ought to reasonably know is confidential, proprietary or trade secret information of ALLUXA, including, without limitation, trade secrets embodied in Products.

14.5 Neither this Agreement nor any rights under this Agreement, other than monies due or to become due, shall be assigned or otherwise transferred by Customer (by operation of law or otherwise) without the prior written consent of ALLUXA. This Agreement shall bind and inure to the benefit of the successors and permitted assigns of the parties.

14.6 This Agreement constitutes the entire agreement between the parties hereto concerning the subject matter of this Agreement, apart from existing non-disclosure agreements, and there are no understandings, agreements, representations, conditions, warranties, or other terms, express or implied, which are not specified herein. This Agreement may only be modified by a written document executed by authorized representatives of ALLUXA and Customer.

14.7 ALLUXA's written acknowledgment sent to Customer shall constitute an acceptance expressly conditioned on assent to the terms hereof and the exclusion of all other terms.