

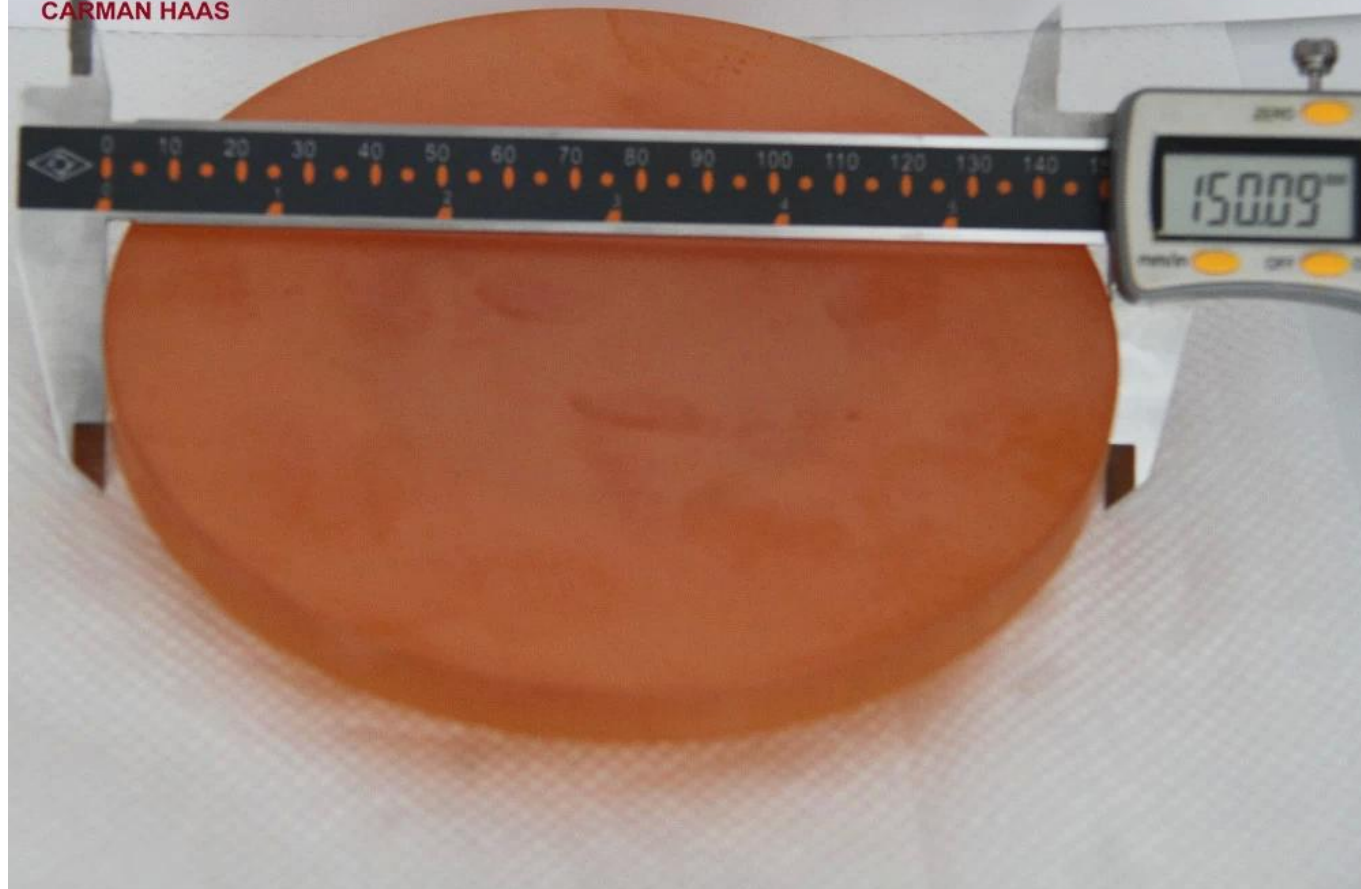


Product Description

Carmanhaas ZNSE Polished Windows are frequently used in optical systems to separate the environment in one part of the system from another, such as to seal vacuum or high-pressure cells. Because the infrared transmitting material has a high index of refraction, an anti-reflection coating is typically applied to windows to minimize losses due to reflections.

To protect scan lenses from backscatter and other workplace hazards, Carmanhaas offers protective windows, also known as debris windows that are either included as the overall scan lens assembly part, or sold separately. These plano-plano windows are available in both ZnSe and Ge materials and Carmanhaas [laser cutting head protective lens window manufacturer](#) also supplied mounted or unmounted.





Technical Parameters

Specifications	Standards
Dimensional Tolerance	+0.0mm / -0.1mm
Thickness Tolerance	±0.1mm
Parallelism : (Plano)	≤ 3 arc minutes
Clear Aperture (polished)	90% of diameter
Surface Figure @ 0.63um	Power: 1 fringes, Irregularity: 0.5 fringe
Scratch-Dig	40-20

ZnSe Polished Windows (Uncoated)

Diameter (mm)	ET (mm)	Coating Type	MATERIAL
10	2/4	Uncoated	ZnSe Laser Grade, CVD
12	2	Uncoated	ZnSe Laser Grade, CVD

12.7	2.5	Uncoated	ZnSe Laser Grade, CVD
13	1/2	Uncoated	ZnSe Laser Grade, CVD
15	2/3	Uncoated	ZnSe Laser Grade, CVD
18	1	Uncoated	ZnSe Laser Grade, CVD
19	2	Uncoated	ZnSe Laser Grade, CVD
20	2/3	Uncoated	ZnSe Laser Grade, CVD
25	1/2/3	Uncoated	ZnSe Laser Grade, CVD
25.4	1/2/3	Uncoated	ZnSe Laser Grade, CVD
30	2/4	Uncoated	ZnSe Laser Grade, CVD
21	1	Uncoated	ZnSe Laser Grade, CVD
38.1	1.5/3/4	Uncoated	ZnSe Laser Grade, CVD
42	2	Uncoated	ZnSe Laser Grade, CVD
50	3	Uncoated	ZnSe Laser Grade, CVD
70	3	Uncoated	ZnSe Laser Grade, CVD
80	3	Uncoated	ZnSe Laser Grade, CVD
90	3	Uncoated	ZnSe Laser Grade, CVD
100	3	Uncoated	ZnSe Laser Grade, CVD
12Lx12W	1	Uncoated	ZnSe Laser Grade, CVD
135Lx102W	3	Uncoated	ZnSe Laser Grade, CVD
161Lx110W	3	Uncoated	ZnSe Laser Grade, CVD

Note: if need other specification and coating, pls contact to our sales.

Click [Raytool Head Window Supplier](#) china to know more

Lens Cleaning

1. For light pollution (dust, fiber particles) were flexible cleaning.

Using a blowing balloon, Blow off scattered contaminants on the surface of the optical element.



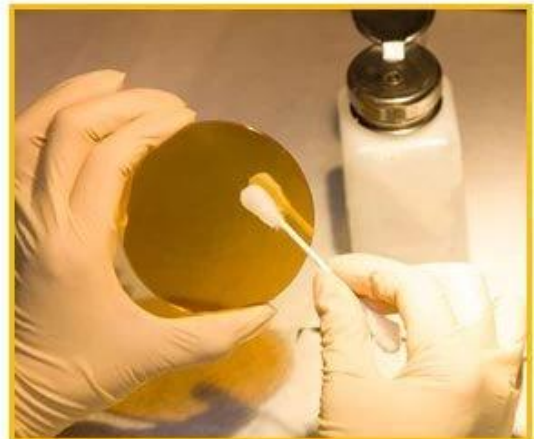
2. For light pollution (stains, fingerprints) were flexible cleaning.

Propanol, acetone glue with a cotton swab or alcohol to gently wipe the surface.



3. For moderately polluted (saliva, oil) in moderate-intensity cleaning.

Infiltrating distilled white vinegar with a cotton swab, wipe the surface a little pressure.







C E R T I F I C A T E

ATTESTATION CERTIFICATE OF MACHINERY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully. 2006/42/EC Machinery Directive and 2014/35/EU Low Voltage Directive have been taken as references for these processes

Company Name : **Camman HAAS Laser Technology (Suzhou) Co., Ltd.**

Company Address : No 155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu, P.R.China

Related Directives and Annex : **Low Voltage Directive 2014/35/EU
Machinery Directive 2006/42/EC**

Related Standards : **EN ISO 12100:2010; EN 60204-1:2006+A1:2009+AC:2010**

Product Name : **Laser Marking Machine**

Report No and Date : **SD-90049717:09.08.2018**

Product Brand/Model/Type : **LMCH-3W,LMCH-5W,LMCH-10W,LMCH-15W,LMCH-20W,LMCH-25W,
LMCH-30W,LMCH-50W,LMCH-60W,LMCH-70W,LMCH-100W,
LMCH-120W,LMCH-150W,LMCH-200W,LMCH-300W,LMCH-500W**

Certificate Number : **M.2018.201.N6073**

Initial Assessment Date : **10.08.2018**

Registration Date : **13.08.2018**

Reissue Date/No :

Expiry Date : **12.08.2023**

The validity of the certificate can be checked through www.udem.com.tr. The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s).

Address: Mithakent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TURKEY

Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 70

E-mail: info@udemtd.com.tr www.udem.com.tr

Signature
UDEM International Certification
Auditing Training Centre Industry
and Trade Inc. Co.



Certificate of Approval

Certificate No.: 10119Q12565ROM

Awarded to

**Carman Haas Laser Technology(SuZhou)
Co., Ltd.**

Organization Code Certificate No. / Unified Social Credit Code:91320594MA1MF4EP56
Add.:No.155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu Province, P.R. China. 215000

Beijing ZhongLian TianRun Certification Center (ZLTR) certify that the
Quality Management System of the above organization has been assessed and found to be
in accordance with the requirements of the standard:
GB/T19001-2016 / ISO9001:2015

SCOPE OF CERTIFICATION/REGISTRATION

**The Research and Development and Production of Optics Lenses (Except the limits of
national laws and regulations.)**

This certificate is made valid when used with certification scopes and the requirements of applicable
laws and regulations. These requirements include, but are not limited to, administrative permits,
scopes of qualifications, and CCC requirements.

Subject to operation conditions in requirements conformity with Quality Management System,

This Certificate is valid for a period of three years only,

Date from: Mar 13th,2019 To: Mar 12th,2022

The effectiveness of this Certificate shall be Validated by periodic surveillance audit
of ZLTR for maintenance.

Information of this certificate can be found on the official website of Beijing Zhonglian Tianrun
Certification center (<http://www.zltr.com.cn>)



Beijing Zhongliantianrun Certification Center

Room2503, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100102

Information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China (<http://www.cca.gov.cn>)

ISO 9001

ISO 9001

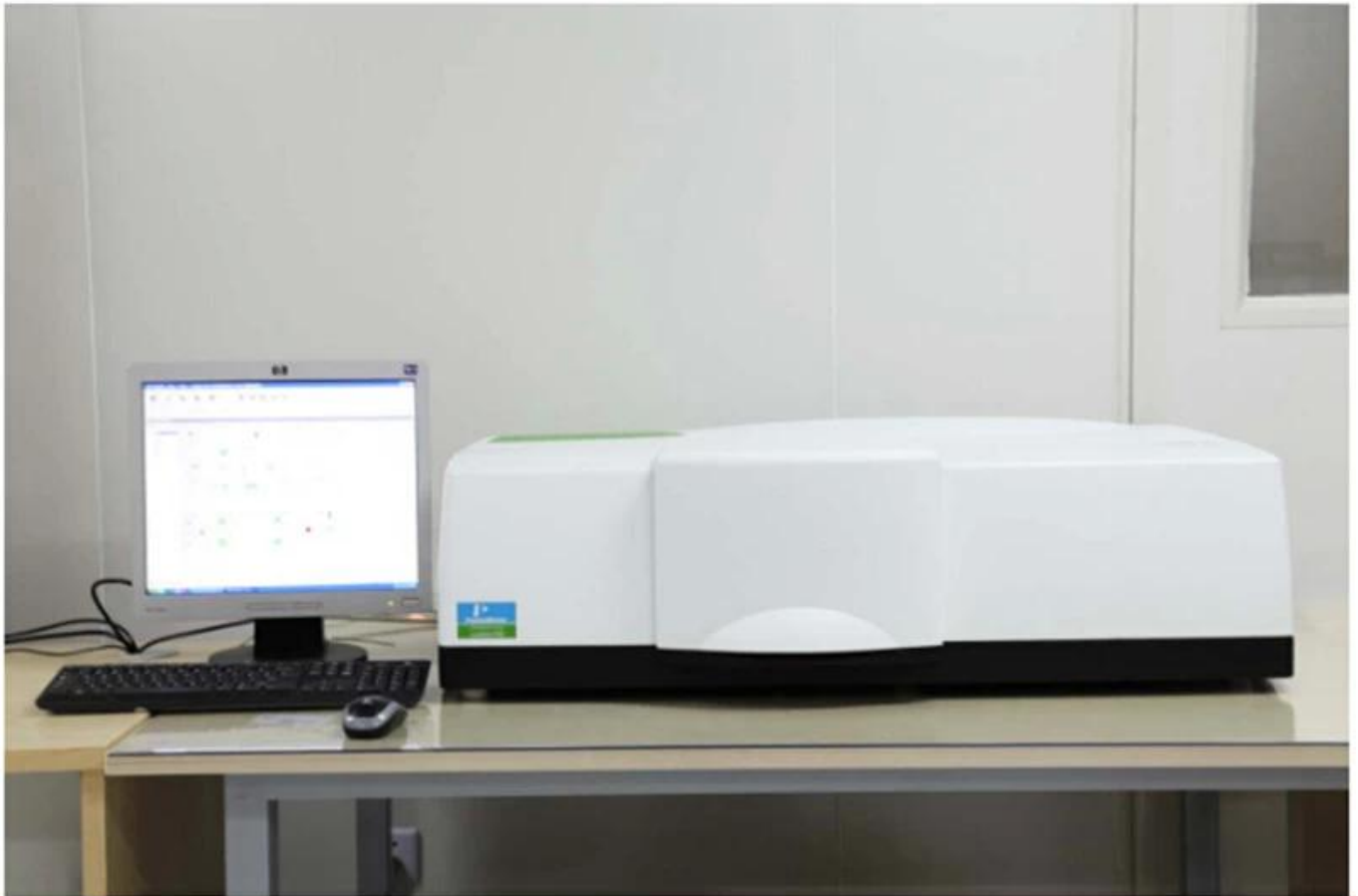


Factory Show









PerkinElmer Lambda 950---Testing Transmission and Reflectivity





Packing List

Packaging & Shipping

Packaging 1



Packaging 2



Packaging 3



Shipping 4





Logistics:

- (1) For Laser Optics order delivery, can be optional with DHL, UPS, FedEx, TNT, EMS etc
- (2) For Laser machine order delivery, can be optional with terms of EXWork, FOB, CNF, CIF By Air or by

Sea based on the buyer's forwarders or ours.

Return Policy:

Should returns be required:

Step 1) Contact us with this website email.

Step 2) Provide as much detail as possible about the problem you are having.

Step 3) Authorization to return the item will be issued.

Step 4) Return the item for the agreed replacement or refund.



FAQ

Q1.Are you a manufacturer?

A1: Yes, we are professional and experienced manufacturer with our own molds and production lines.

Q2.How about quality of products?

A2: Our technicians and QC teams test the products one by one using aging line, professional devices and instruments to ensure the quality for all products.

Q3.How about price?

A3: We are a manufacturer and always offer our customers the most competitive prices.

Q4.How to place an order?

A4: Contact with online service, or sent email to us directly, we will reply to you with product price, specifications, packing etc. soon. Thank you.

Q5.May I send material to test marking performance?

A5: Yes! You are welcome to send material to test our superior quality and service.

Q6.Can I visit your factory?

A6: Yes, welcome to visit our factory at your convenient time.

Q7.How can I make OEM or ODM orders?

A7: We have different print processing for different OEM/ODM orders. Please contact us with online service or send email to us directly.

Q8. How should I pay for my orders?

A8: You can pay by T/T would be available for qualified bank and MOQ required for each order.