



SPECIFICATION

RTS – Test Bench 1” dia. Mirror Specifications

APPROVALS	DATE	REV	DCN NO.	BY	CHECK	DCC	DATE
AUTHOR: H. Armandula	02-14-07						
CHECKED: L. Zhang							
APPROVED: G. Billingsley							
DCC RELEASE							

1 Material

Fused Silica 7980, Class 0C

2 Dimensions

1” dia. +0/- .010"

Thickness: 1/4" ± .010"

Chamfers: 0.002" ± 0.001" @ 45° ±15°

3 Surface Roughness

Side 1

Superpolished - < 1 Angstrom over central 80 % of diameter with 10-5 scratch-dig; best effort for 0/0

20-10 scratch-dig outside central 80 % of diameter

Identify Side 1 with an arrow

Side 2

< 5 Angstrom over central 80 % of diameter

4 Surface Figure

Side 1 and 2

Flat ≤ λ/10 at 632.8 over central 80% (clear aperture)

Wedge: ≤ 5 arc min

5 Coating

Wavelength: 1064 nm

Angle of incidence: 45° - “P” polarization

Coating absorption ≤ 1 ppm

Scatter <15 ppm

Coating uniformity: 1nm rms

**RTS – Test Bench 1” dia. Mirror Specifications****Side 1****HR** – $R > 99.97\%$ **Side 2****AR** - $R \leq 0.2\%$

Coating vendor to provide:

1. One 1” witness sample from each coating run
2. Two spectrophotometer graphs of the reflectance and transmittance of the HR coatings must be provided; one covering the spectrum from 530nm to 1200nm; the other, with increased sensitivity, to show wavelengths from 900nm to 1100nm
3. Spectrophotometer graphs of the reflectance of the AR coating taken as cited above.



Research Electro-Optics Inc.

CERTIFICATE OF CONFORMANCE

Research Electro-Optics (REO), Inc.
5505 Airport Boulevard
Boulder, Colorado 80301 USA
(303) 938-1960, Fax (303) 447-3279

Country of Origin: United States of America

We hereby certify that all Research Electro-Optics, Inc. products are in conformance with the regulations of the EC - Directive 2002/95/EC (RoHS) together with the EC Decision 2005/747/EC.

REO Part # :	NS11415	Rev. :	NS
Part Description :	HR @ 1064nm, 45degree AOI on 1" diameter CFM		
REO Job # :	02872		
REO Coating Run # :	S7-326-P1/S7-329-P1		
Test data	<input checked="" type="checkbox"/> is <input type="checkbox"/> is not included.		
Certified by (name) :	Robert M. Morrissey	Date :	6/4/2007
Certified by (signature) :		Date :	6/4/2007

Shipping Information:			
Date :	06/04/07		
Customer Part # :	-	Rev. :	-
Shipper # :	25788		
Initials :	JP		

Comments:	
One part has scratches on S1. This part is packaged seperately with "scratches on S1" noted on the label. -RMM 6/04/07	
S _o # 9464	
P _o # 75-S030047	
Id# 1344-03	
<i>Witness piece included</i>	

Research Electro-Optics, Inc. hereby certifies that the items listed above have been inspected and tested to the extent necessary to conform with all the requirements of the noted purchase order, drawing, and applicable specification(s). Inspection and test data are on file at our facility and will be furnished to customer upon request.



Research Electro-Optics, Inc.

5505 Airport Blvd.
Phone: (303) 938-1960

Boulder, CO 80301
Fax: (303) 447-3279

Metrology Data

part number: NS11415
job number: 2872
run number: S7-326

measurement date: 5/30/2007
operator: SR

serial number	total loss (ppm)	transmission (ppm)	absorption + scatter (ppm)
11146	3.4	2.4	1.0

Notes: Ringdown and laser transmission measurement at 1064 nm
45 deg AOI, s-pol

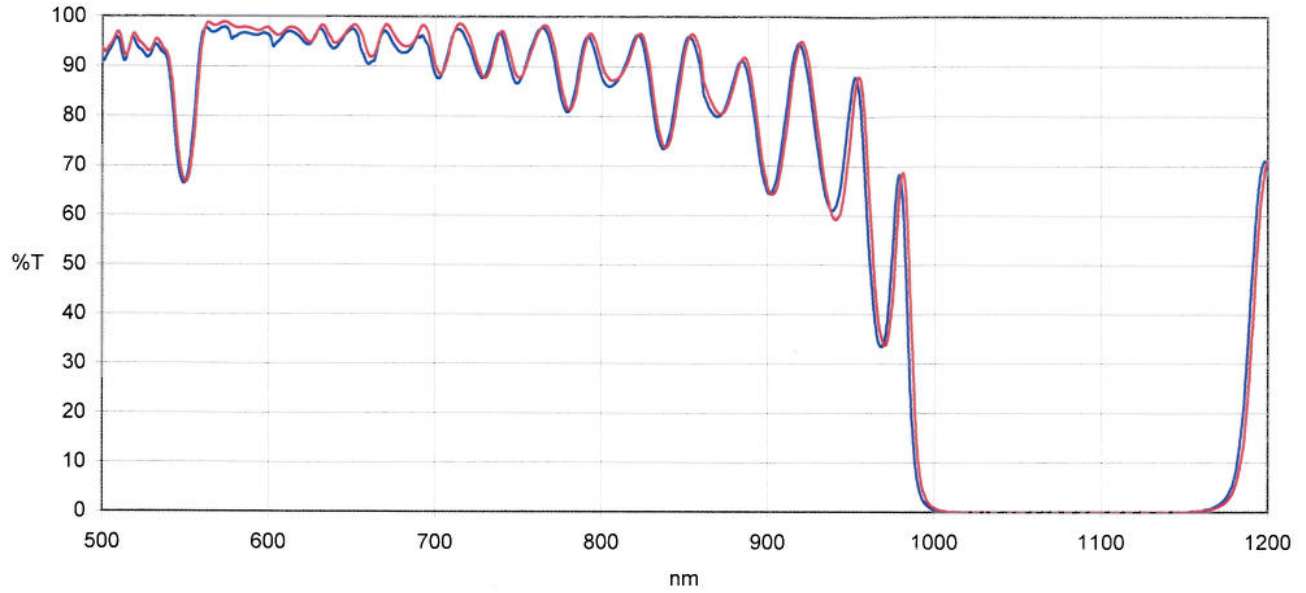


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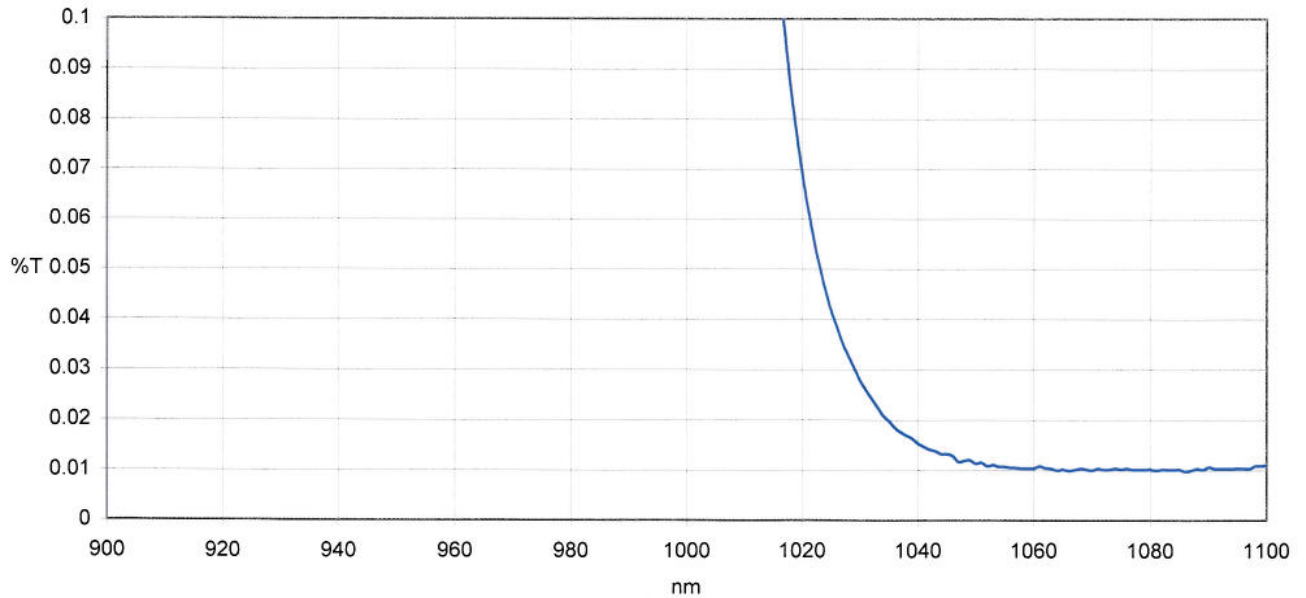
Spectrophotometer Report

Run #:	S7-326-P1
SP ID #:	PE900-2
CF:	1.0000
Date:	5/30/2007
Time:	11:17:16 AM
Analyst:	dh

HR@1064nm, Scanned at 45°AOI P-polarization



1064nm Detail



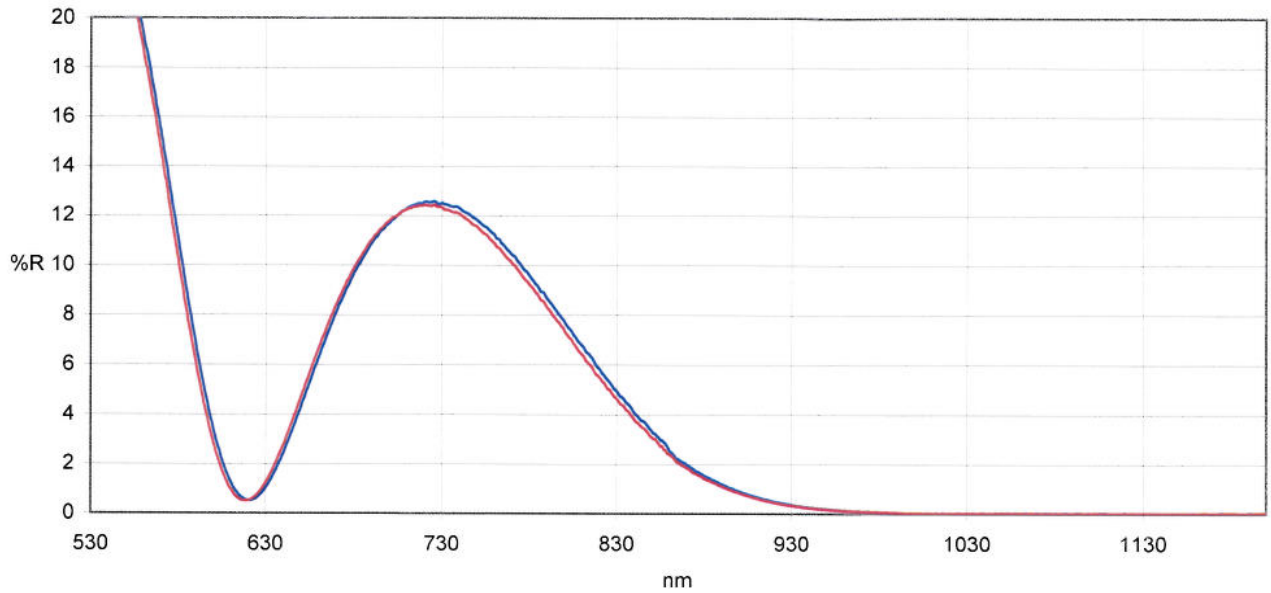


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Spectrophotometer Report

Run #:	S7-329-P1
SP ID #:	PE900-1
CF:	0.0088
Date:	5/31/2007
Time:	9:40:21 AM
Analyst:	CX

AR @ 1064nm, Scan at 45° AOI, P-Polarization



Detail @ 1064nm

