

QUALITY REPORT

PART NUMBER: C004360

DESCRIPTION: NH-200-0656

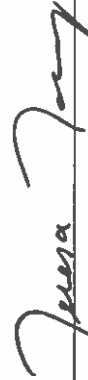
JOB NO: 37176

CUSTOMER: UCAR

Part Serial Number	Spec.	H21351	H21352	H21353	H21354	H21355
Finished Dimensions	2.00" +0/-0.010"	PASS	PASS	PASS	PASS	PASS
Part Thickness	0.500" nom	PASS	PASS	PASS	PASS	PASS
Operating Wavelength Range	656.3	PASS	PASS	PASS	PASS	PASS
Surface Quality (Scr/Dig)	40/20	PASS	PASS	PASS	PASS	PASS
Clear Aperture	1.60"	PASS	PASS	PASS	PASS	PASS
Beam Deviation	≤ 1 arc min	17.3 secs	7.16 secs	12.9 secs	7.89 secs	18.0 secs
Trans. Wavefront @633 nm PV	≤ L/5	.155	.132	.123	.130	.169
Pass/Fail Reason		PASS	PASS	PASS	PASS	PASS

Date: 9-3-21

QC Sign



comment:

No.	Date	Shop floor #	Part serial #	Filter (nm)	Part wavelength (nm)	Ret (waves)	Ret (nm)
1	9/2/2021	37176	H21351	649.1	656.3	0.5028	330.0

MEAN (waves): 0.5028
Std. dev. (waves): 0.00000

of measurements: 1

MEAN (nm): 330.0
Std. dev. (nm): 0.00

No.	Date	Shop floor #	Part serial #	Filter (nm)	Part wavelength (nm)	Ret (waves)	Ret (nm)
1	9/2/2021	37176	H21352	649.1	656.3	0.5007	328.6

MEAN (waves): 0.5007

Std. dev. (waves): 0.00000

of measurements: 1

MEAN (nm): 328.6

Std. dev. (nm): 0.00

No.	Date	Shop floor #	Part serial #	Filter (nm)	Part wavelength (nm)	Ret (waves)	Ret (nm)
1	9/2/2021	37176	H21353	649.1	656.3	0.5001	328.2

MEAN (waves): 0.5001
Std. dev. (waves): 0.00000

of measurements: 1

MEAN (nm): 328.2
Std. dev. (nm): 0.00

No.	Date	Shop floor #	Part serial #	Filter (nm)	Part wavelength (nm)	Ret (waves)	Ret (nm)
1	9/2/2021	37176	H21354	649.1	656.3	0.4983	327.1

MEAN (waves): 0.4983
Std. dev. (waves): 0.00000

of measurements: 1

MEAN (nm): 327.1
Std. dev. (nm): 0.00

No.	Date	Shop floor #	Part serial #	Filter (nm)	Part wavelength (nm)	Ret (waves)	Ret (nm)
1	9/2/2021	37176	H21355	649.1	656.3	0.4998	328.0

MEAN (waves): 0.4998

Std. dev. (waves): 0.00000

of measurements: 1

MEAN (nm): 328.0

Std. dev. (nm): 0.00

TWD & BD Application

8m Aperture

MEASURE

Analyze

Mask Data

Calibrate

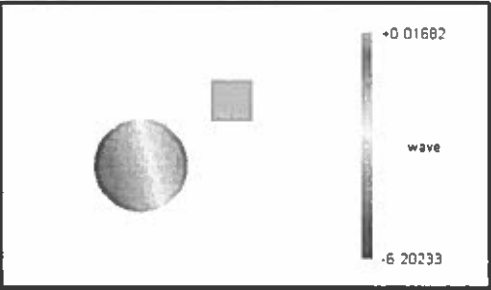
Save Data

Load Data

Reset

Beam Dev

Angles



Wedge Mag 34.67 sec

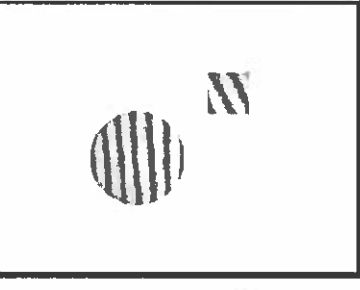
Wedge Ang 13.86 °

Angle Err sec

Beam Deviation: 17.33743 sec

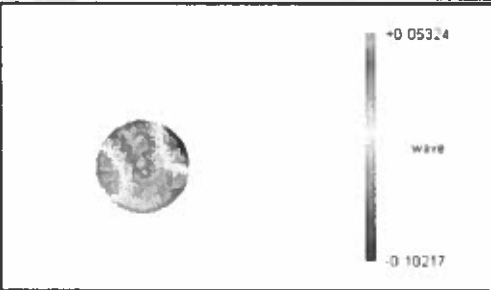
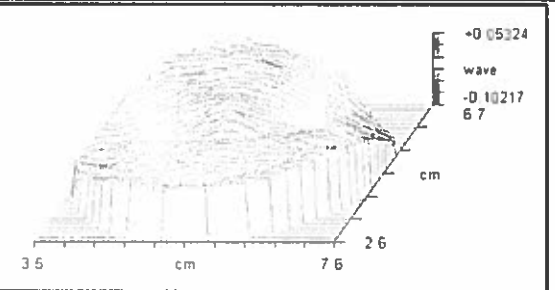
Trim: 0

Intensity Map



Measure Cntrl

Wavefront/Surface

PV 0.155 wave

rms 0.031 wave

Power -0.042 wave

AstMag 0.12 wave

Trim: 0

Remove: PET TLT PWR AST

Removed: PST TLT

Report

Process

VidMon (Wedge)

VidMon (Angle)

Measure Controls

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Measure Attributes

Fri Sep 03 13:16:13 2021

H21351

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Camera Res: 0.4599 mm

TMD & BD Application

8m Aperture

MEASURE

Analyze

Mask Data

Calibrate

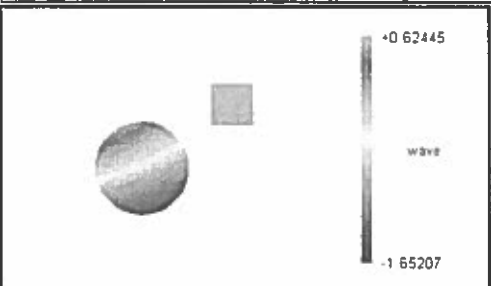
Save Data

Load Data

Reset

Beam Dev

Angles



Wedge Mag 14.32 sec

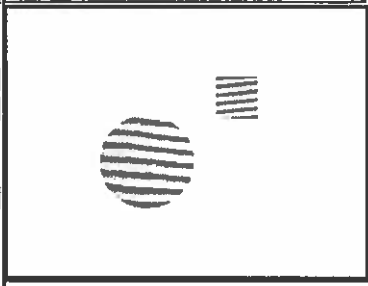
Wedge Ang 112.08 °

Angle Err sec

Beam Deviation: 7.16021 sec

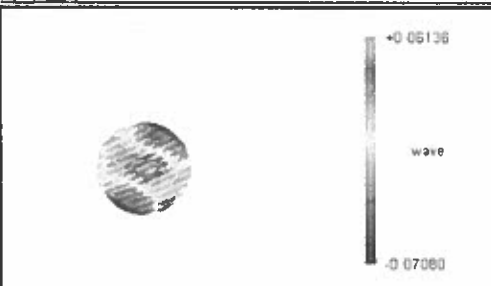
Trim: 0

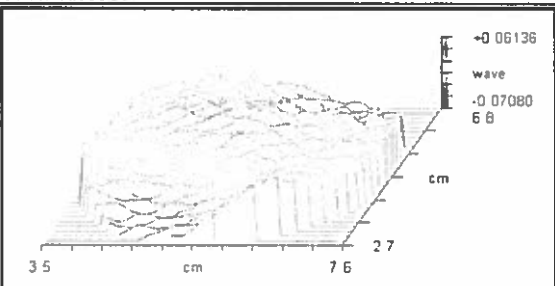
Intensity Map



Measure Cntrl

Wavefront/Surface





PV 0.132 wave

rms 0.027 wave

Power -0.051 wave

AstMag 0.09 wave

Trim: 0

Remove: PST TLT PWR AST

Removed: PST TLT

Report

Process

VidMon (Wedge)

VidMon (Angle)

Measure Controls

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Measure Attributes

Fri Sep 03 13:18:57 2021

H21352

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Camera Res: 0.4599 mm

TWD & BD Application

Sm Aperture

MEASURE

Analyze

Mask Data

Calibrate

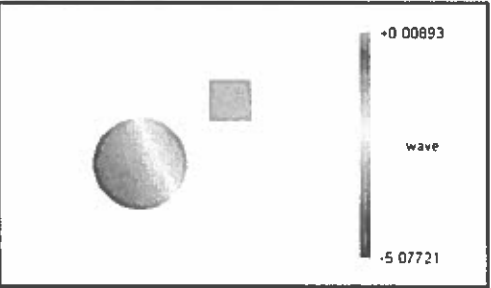
Save Data

Load Data

Reset

Beam Dev

Zygo Angles



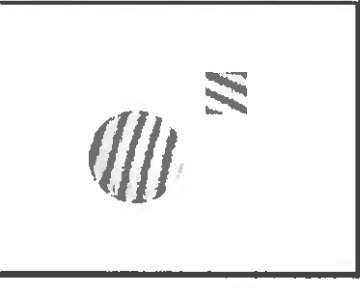
wave

+0.00893

-0.00893

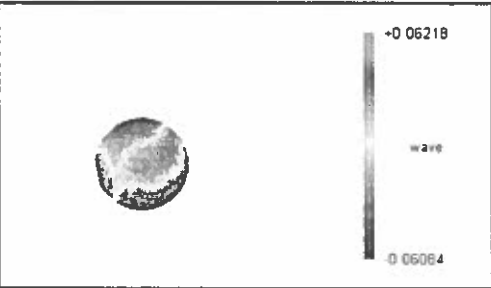
Wedge Mag	25.82	sec
Wedge Ang	26.61	*
Angle Err		sec
Beam Deviation	12.90802	sec
Trim	0	

Zygo Intensity Map



Measure Ctrl

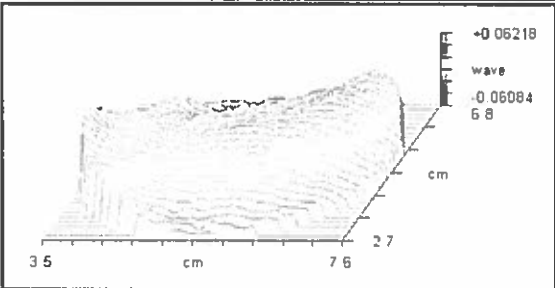
Zygo Wavefront/Surface



wave

+0.06218

-0.06084



wave

+0.06218

-0.06084

6.8

cm

PV	0.123	wave
rms	0.025	wave
Power	-0.042	wave
AstMag	0.09	wave

Trim: 0

Remove: PST TLT PWR AST

Removed: PST TLT

Zygo Measure Controls

Report

Process

VidMon(Wedge)

VidMon(Angle)

Setup Type	Wedge (Trans)
Refractive Index	1.514000

Zygo Measure Attributes

Fri Sep 03 13:20:20 2021	Setup Type: Wedge (Trans)
H21353	Refractive Index: 1.514000
	Camera Res: 0.4599 mm

TWD & BD Application

5m Aperture

MEASURE

Analyze

Mask Data

Calibrate


Save Data

Load Data

Reset

Beam Dev

Angles




wave

+0.00665

-0.00665


Wedge Mag	15.79	sec
Wedge Ang	29.47	°
Angle Err		sec
Beam Deviation	7.89746	sec
Trim	0	

Intensity Map



Measure Cntrl

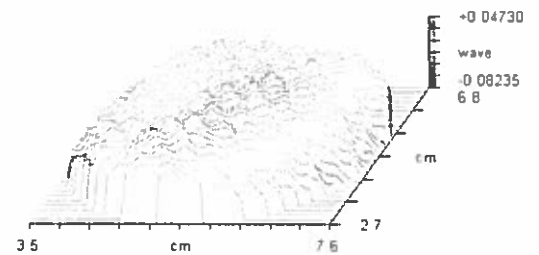
Wavefront/Surface



wave

+0.04730

-0.00235



cm

+0.04730

-0.00235

6.8

2.7

3.5 cm 7.6

PV	0.130	wave
rms	0.025	wave
Power	-0.058	wave
AstMag	0.07	wave

Trim: 0

Remove:				
PST	TLT	PWR	AST	
Removed:				
PST TLT				

Report

Process

VidMon(Wedge)

VidMon(Angle)

Measure Controls

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Measure Attributes

Fri Sep 03 13:21:25 2021

H21354

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Camera Res: 0.4599 mm

TWD & BD Application

8m Aperture

MEASURE

Analyze

Mask Data

Calibrate

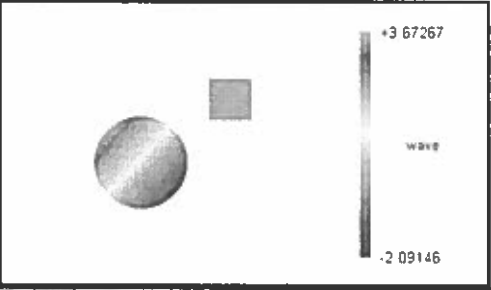
Save Data

Load Data

Reset

Beam Dev

Angles



Wedge Mag 36.01 sec

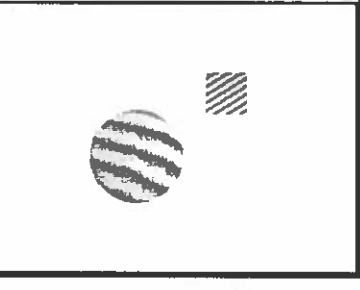
Wedge Ang 137.57 °

Angle Err sec

Beam Deviation: 16.00604 sec

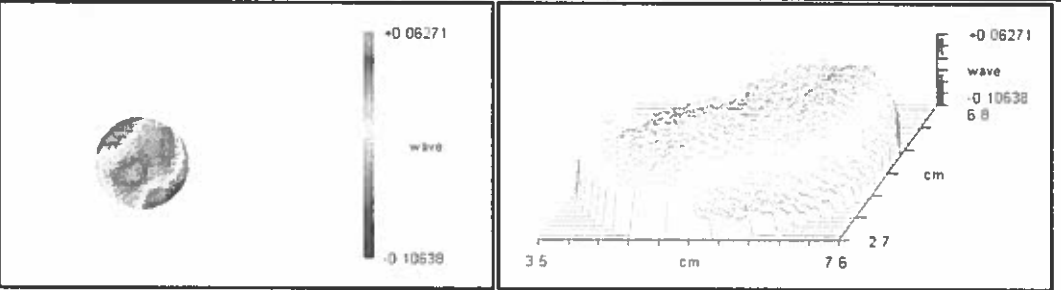
Trim: 0

Intensity Map



Measure Ctrl

Wavefront/Surface



PV 0.169 wave

rms 0.035 wave

Power -0.083 wave

AstMag 0.11 wave

Trim: 0

Remove: PST TLT PWR AST

Removed: PST TLT

Report

Process

VidMon(Wedge)

VidMon(Angle)

Measure Controls

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Measure Attributes

Fri Sep 03 13:22:41 2021

H21355

Setup Type: Wedge (Trans)

Refractive Index: 1.514000

Camera Res: 0.4599 nm