

## Certificate of Conformance

**Customer** Cal Tech  
**PO** 75-S392888  
**Sales Order** 1327  
**Description** PR3\_Layers\_V2-R2  
 AR@1064nm@40-50deg(stress comp)  
**Run Number** V2-343, V2-347

Qty	Substrate Description	Customer PN	Substrate Material
5	2" dia 1km cc/pl with 2deg wedge	40m RC folding mirror(PR3/SR3)	FS

**Exceptions**

FiveNine Optics, Inc. hereby certifies that the items listed above have been inspected and tested to the extent necessary to conform with all the requirements on the purchase order, drawing and applicable specifications. Products are in conformance with the regulations of the EC Directive 2011/65/EU (RoHS 2).

Quality Inspection Certified by:

Date

1/29/2019

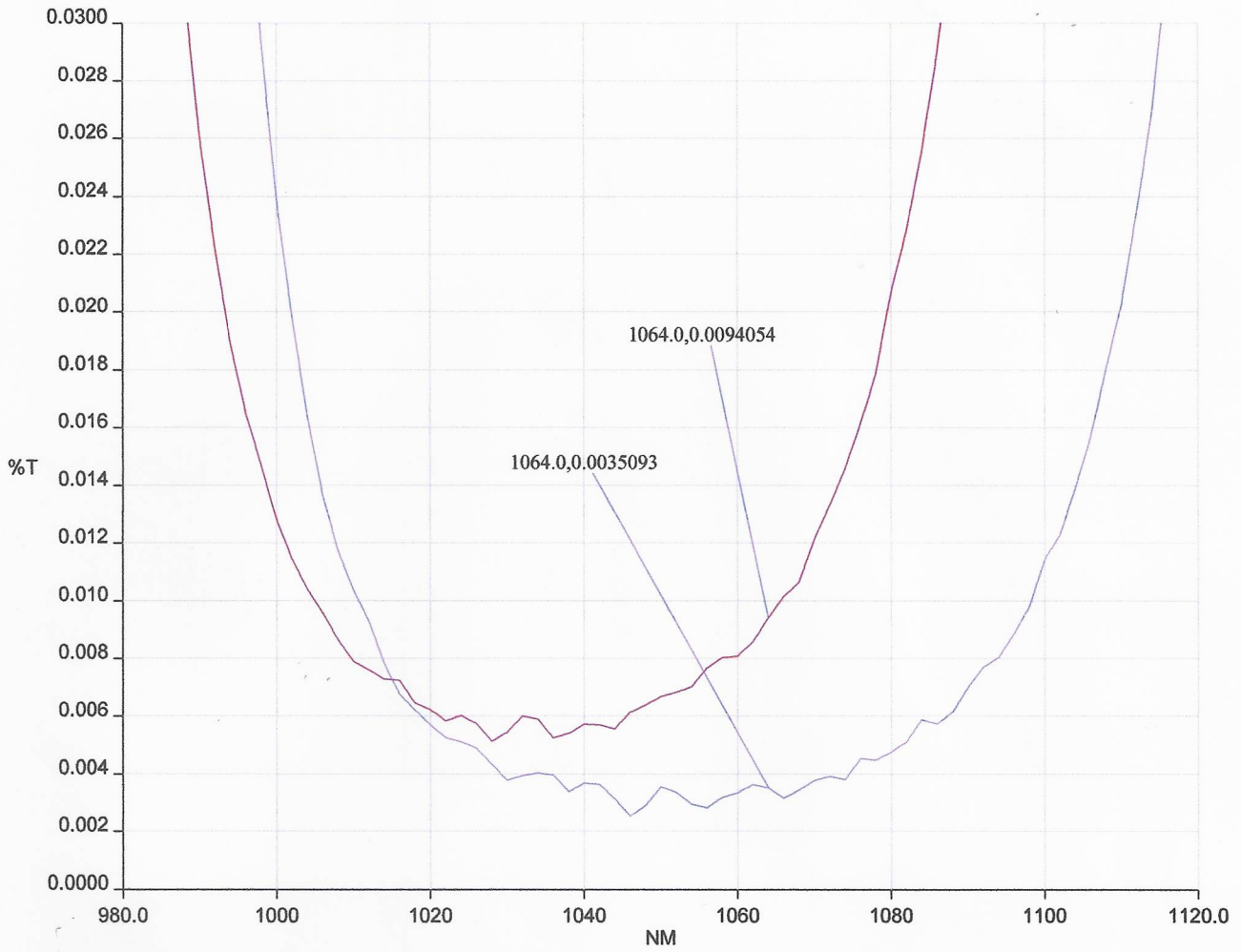
*Zach Merig*



# FiveNine Optics

Date: 1/28/2019

Time: 10:57:37 AM



— PE10727.SP - 1/28/2019 - V2-343, FS WIT, AB500, P-POL@40°, F=.01

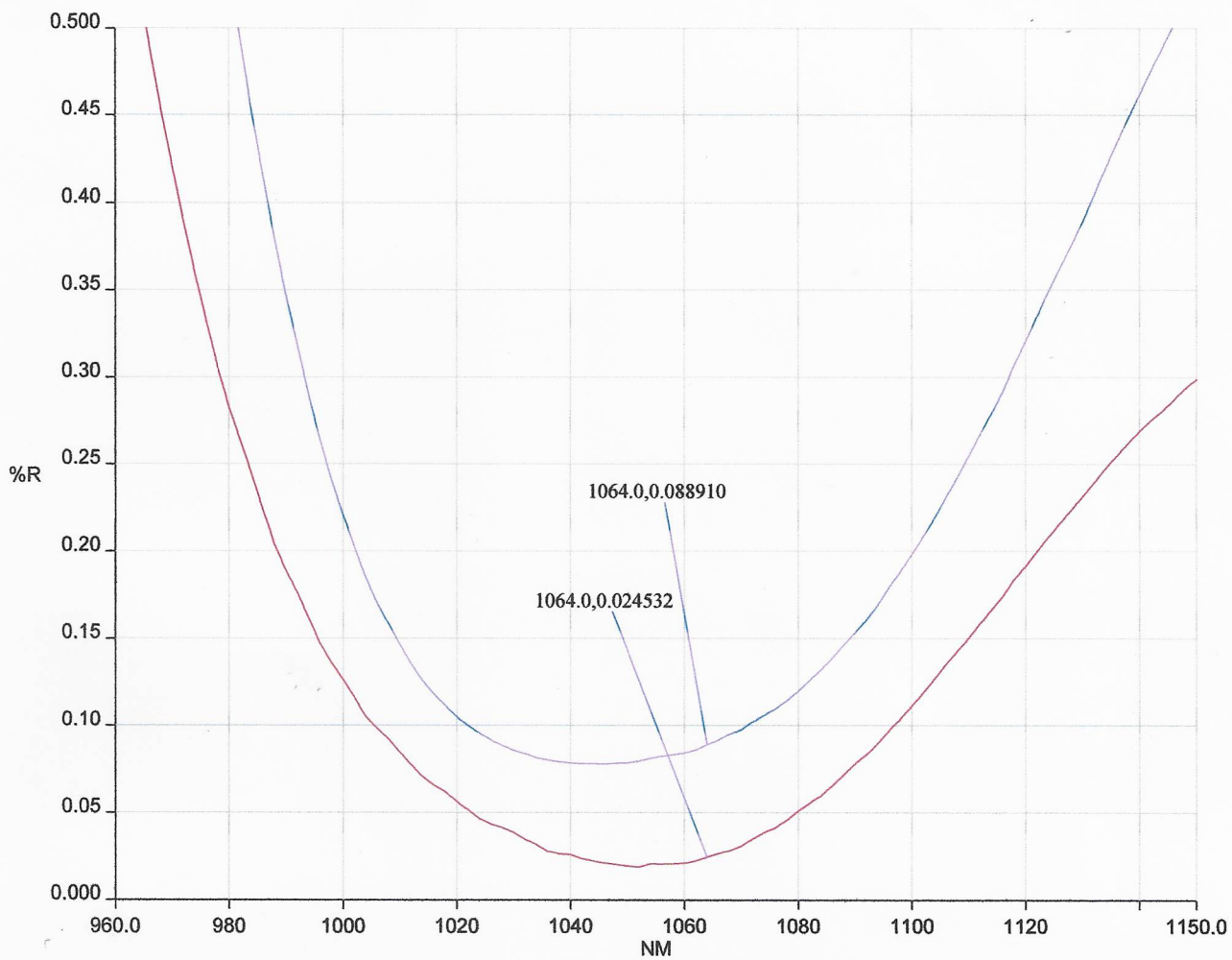
— PE10728.SP - 1/28/2019 - V2-343, FS WIT, AB500, P-POL@45°, F=.01

AR

# FiveNine Optics

Date: 1/29/2019

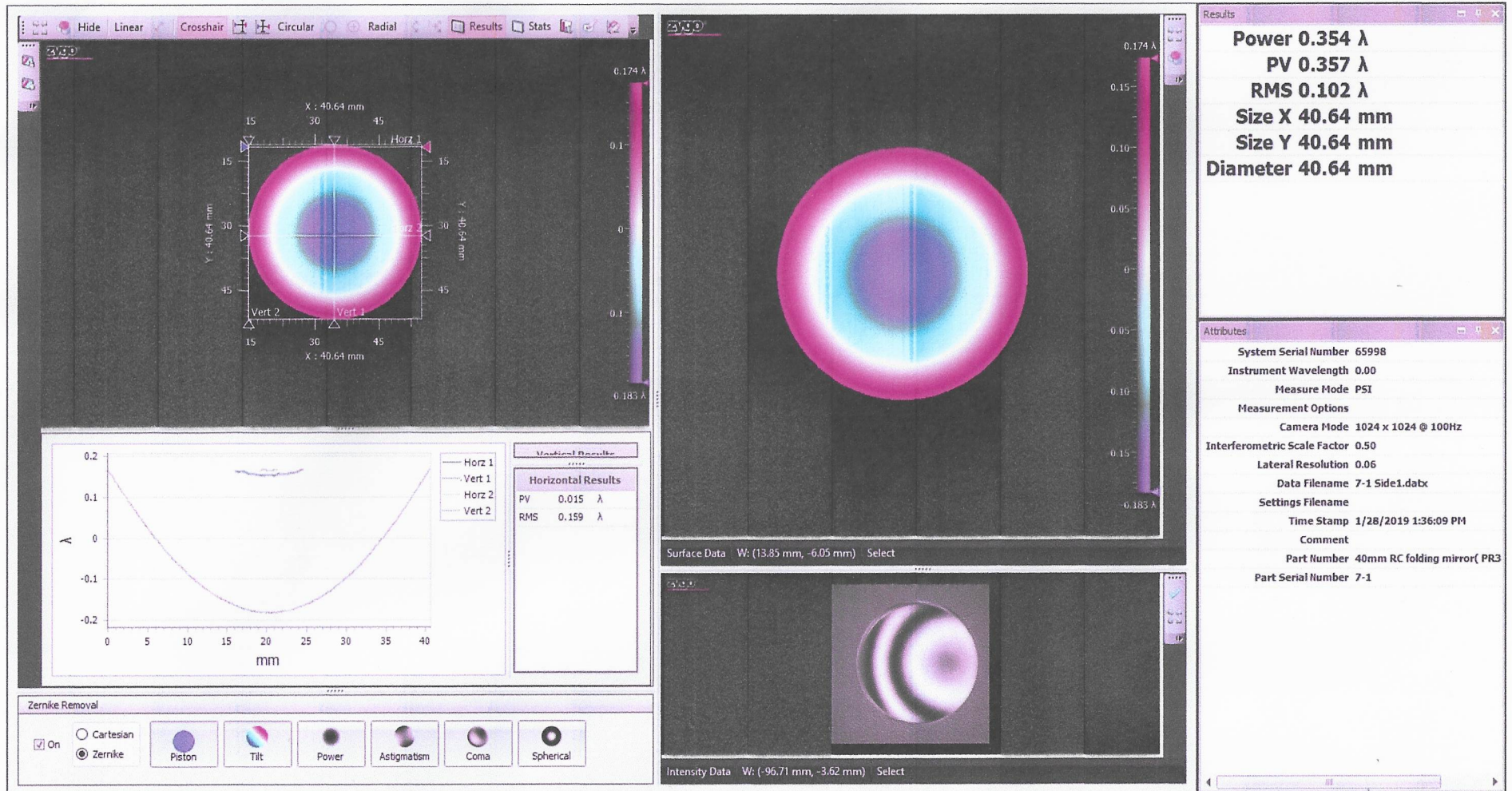
Time: 3:46:04 PM



— PE20659.SP - 1/29/2019 - V2-347, FS WIT, BB, P-POL@40° F=.0114

— PE20660.SP - 1/29/2019 - V2-347, FS WIT, BB, P-POL@45° F=.0064

# 7-1 Side1 (HR)



# 7-1 Side2 (AR)



**Results**

Power -0.028  $\lambda$   
 PV 0.106  $\lambda$   
 RMS 0.008  $\lambda$   
 Size X 40.64 mm  
 Size Y 40.64 mm  
 Diameter 40.64 mm

**Attributes**

System Serial Number 65998  
 Instrument Wavelength 0.00  
 Measure Mode PSI  
 Measurement Options  
 Camera Mode 1024 x 1024 @ 100Hz  
 Interferometric Scale Factor 0.50  
 Lateral Resolution 0.06  
 Data Filename 7-1 Side2.dabx  
 Settings Filename  
 Time Stamp 1/28/2019 1:37:54 PM  
 Comment  
 Part Number 40mm RC folding mirror( PR3  
 Part Serial Number 7-1

**Horizontal Results**

PV	0.006 $\lambda$
RMS	0.018 $\lambda$

**Zernike Removal**

On

Cartesian

Zernike

Piston

Tilt

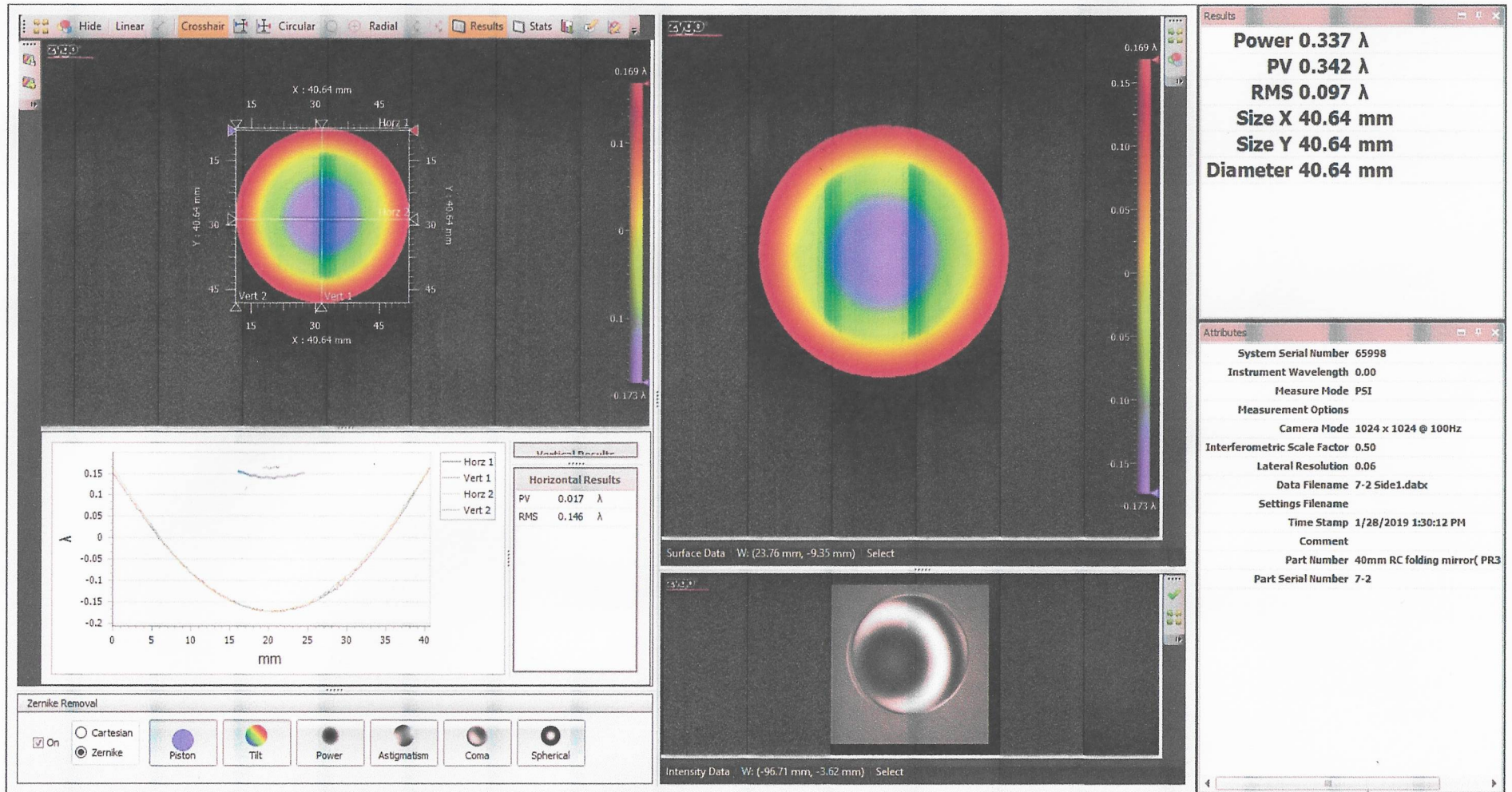
Power

Astigmatism

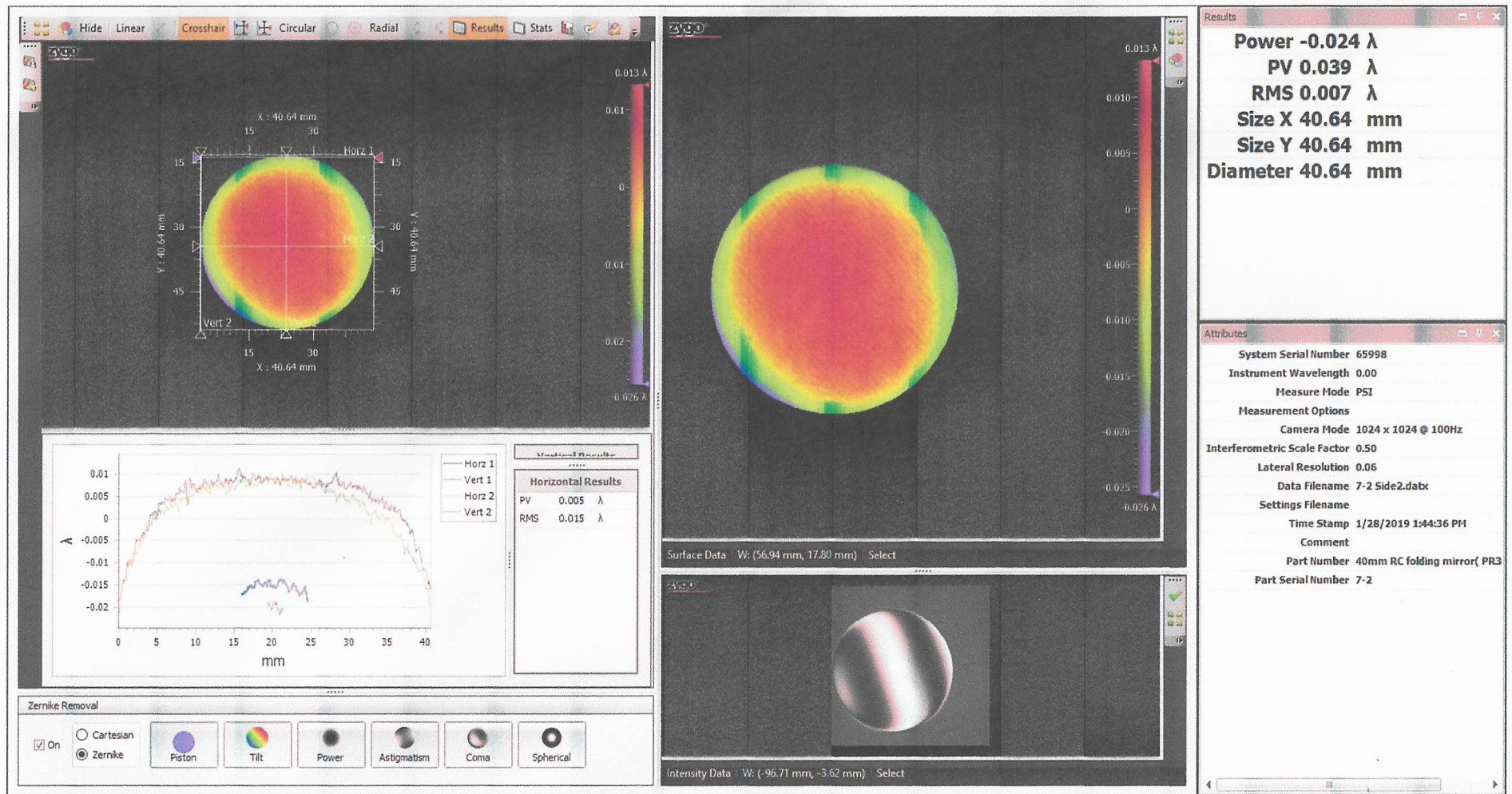
Coma

Spherical

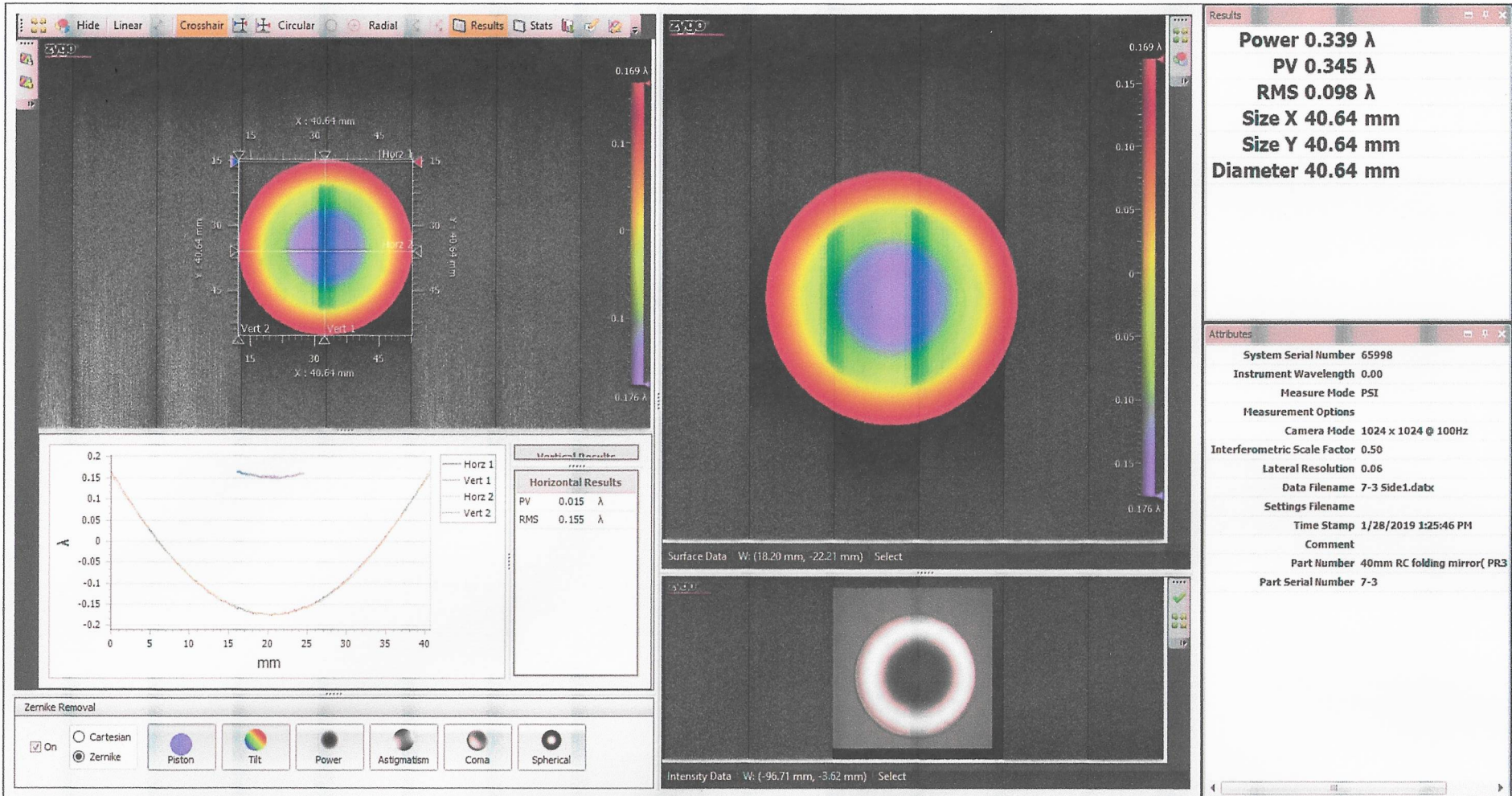
# 7-2 Side1 (HR)



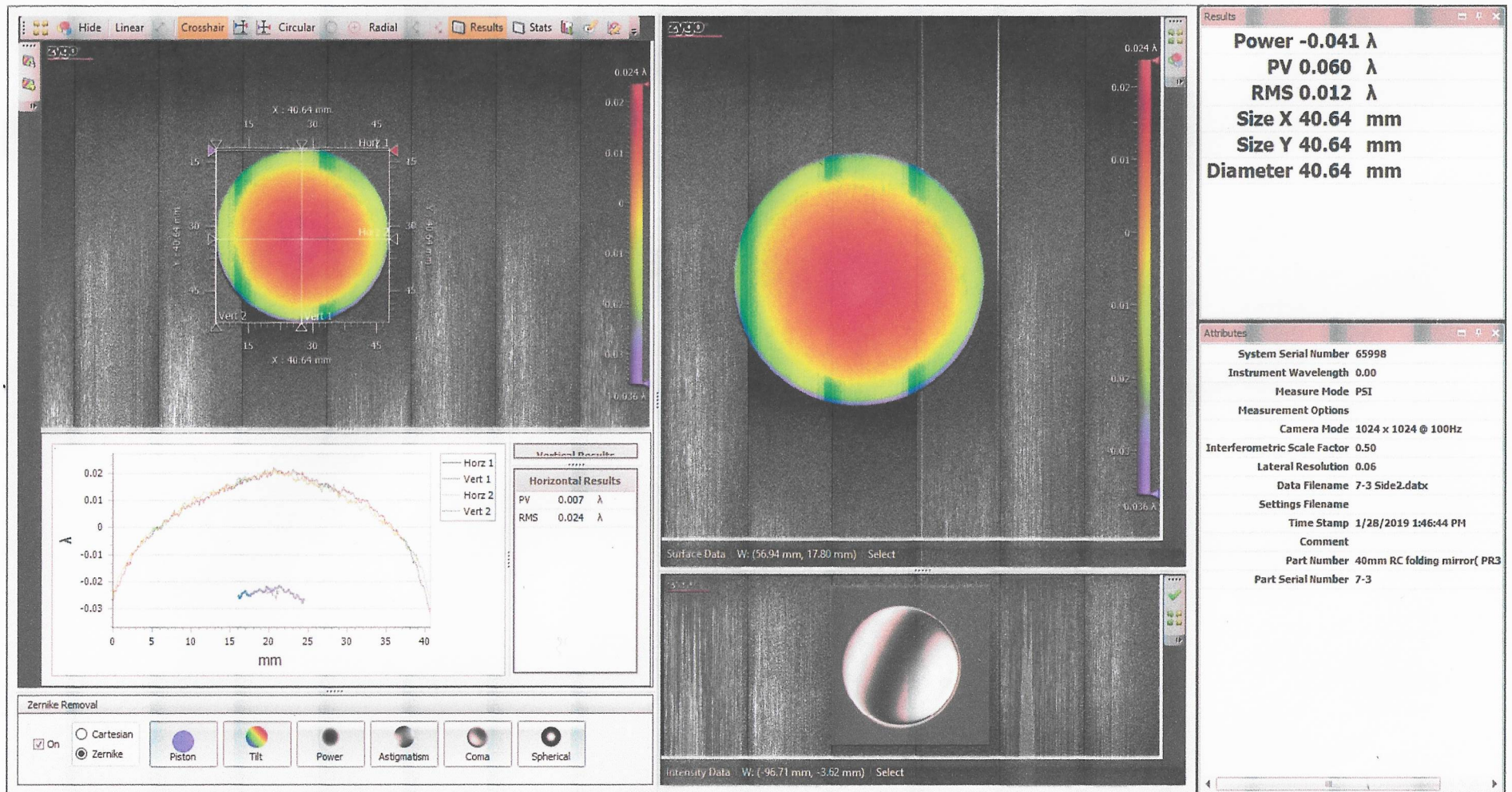
# 7-2 Side2 (AR)



# 7-3 Side1 (HR)



# 7-3 Side2 (AR)



# 7-4 Side1 (HR)

**Results**

- Power 0.330  $\lambda$
- PV 0.335  $\lambda$
- RMS 0.095  $\lambda$
- Size X 40.64 mm
- Size Y 40.64 mm
- Diameter 40.64 mm

**Attributes**

- System Serial Number 65998
- Instrument Wavelength 0.00
- Measure Mode PSI
- Measurement Options
- Camera Mode 1024 x 1024 @ 100Hz
- Interferometric Scale Factor 0.50
- Lateral Resolution 0.06
- Data Filename 7-4 Side1.dabx
- Settings Filename
- Time Stamp 1/28/2019 1:34:10 PM
- Comment
- Part Number 40mm RC folding mirror( PR3
- Part Serial Number 7-4

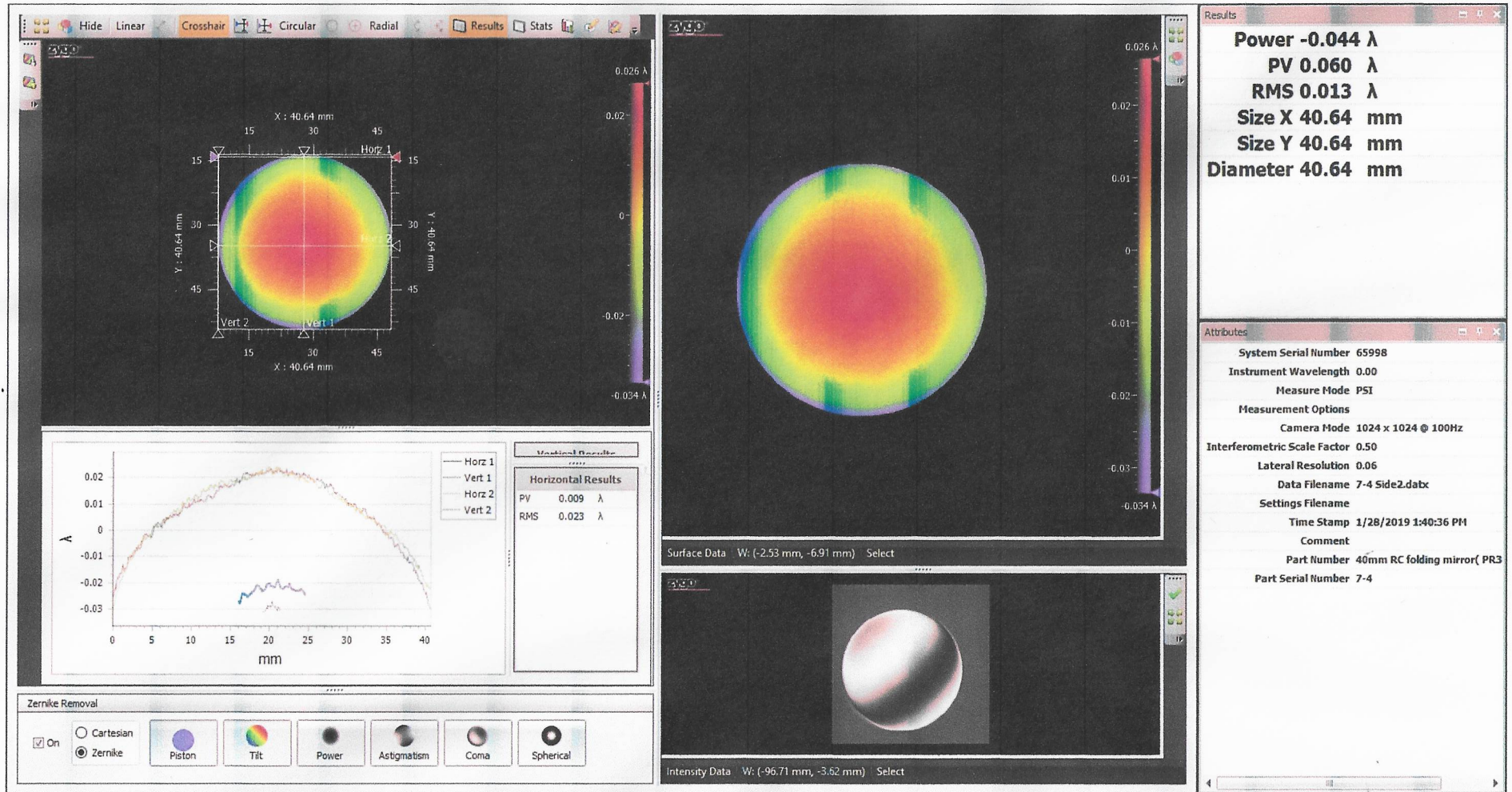
**Horizontal Results**

PV	0.016 $\lambda$
RMS	0.148 $\lambda$

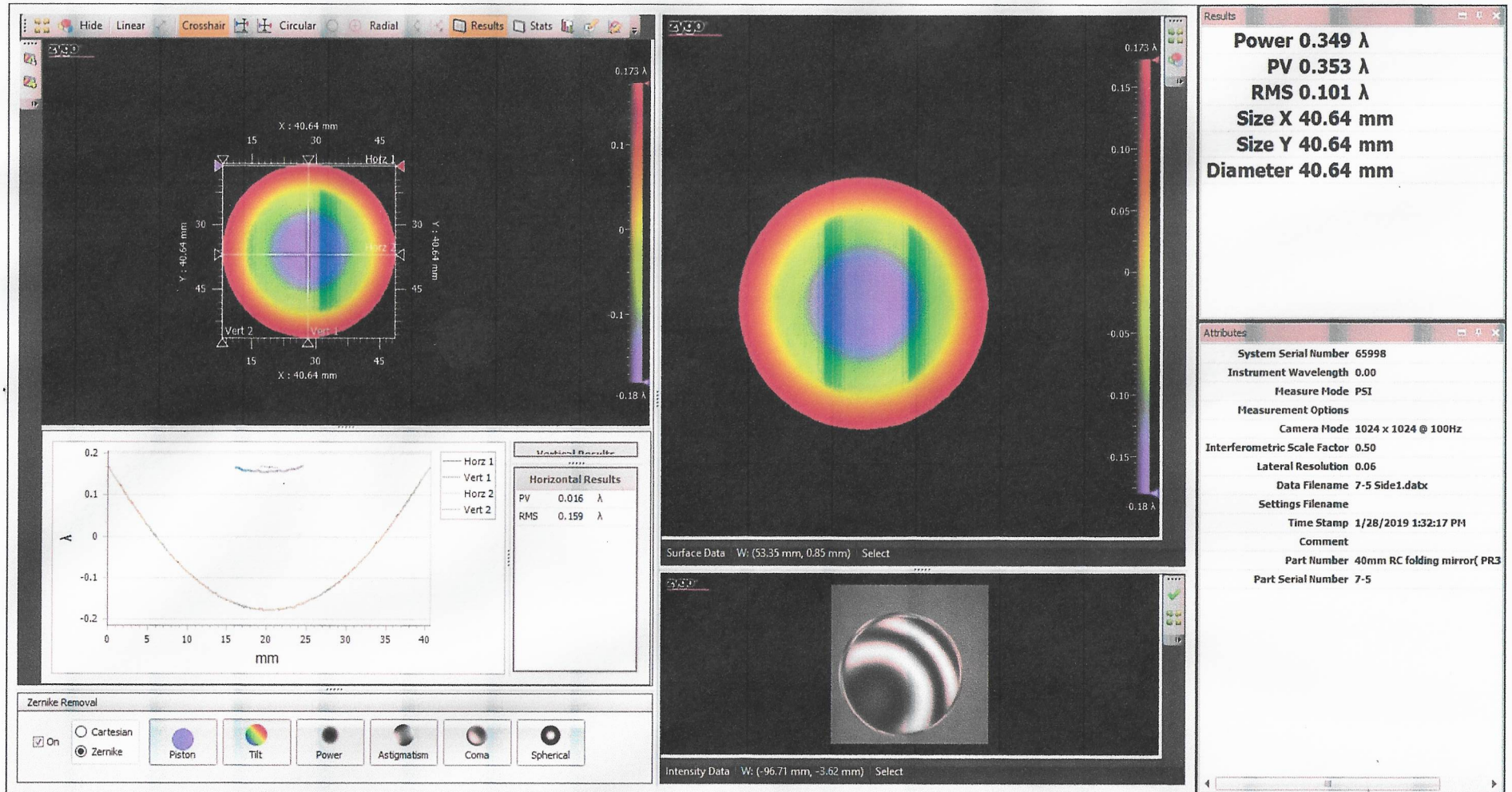
**Zernike Removal**

- On
- Cartesian
- Zernike
- Piston
- Tilt
- Power
- Astigmatism
- Coma
- Spherical

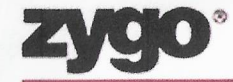
# 7-4 Side2 (AR)



# 7-5 Side1 (HR)



# 7-5 Side2 (AR)



**Results**

Power  $-0.047 \lambda$   
 PV  $0.062 \lambda$   
 RMS  $0.014 \lambda$   
 Size X  $40.64 \text{ mm}$   
 Size Y  $40.64 \text{ mm}$   
 Diameter  $40.64 \text{ mm}$

**Attributes**

System Serial Number 65998  
 Instrument Wavelength 0.00  
 Measure Mode PSI  
 Measurement Options  
 Camera Mode 1024 x 1024 @ 100Hz  
 Interferometric Scale Factor 0.50  
 Lateral Resolution 0.06  
 Data Filename 7-5 Side2.dabx  
 Settings Filename  
 Time Stamp 1/28/2019 1:42:54 PM  
 Comment  
 Part Number 40mm RC folding mirror( PR3  
 Part Serial Number 7-5

**Horizontal Results**

PV  $0.006 \lambda$   
 RMS  $0.030 \lambda$

**Zernike Removal**

On  
 Cartesian  
 Zernike  
 Piston Tilt Power Astigmatism Coma Spherical

Surface Data W: (-3.96 mm, 29.87 mm) Select

Intensity Data W: (-96.71 mm, -3.62 mm) Select