System/Prescription Data

File : C:\tbida\zemax\zemax\dct\rc\RC_D11\GWAVES_As_built\PF_2EL_F6_Reimager2_DCT_as-built_Tol_with_flange.Z
Title: DCT Prime Focus AOS Test Optics, F/6.2 Reimager
Date : MON SEP 13 2010

LENS NOTES:

Notes...

GENERAL LENS DATA:

```
Surfaces               :              21
Stop                   :               2
System Aperture        : Entrance Pupil Diameter = 4200
Glass Catalogs         : SCHOTT INFRARED OHARA
Ray Aiming             : Off
Apodization            : Uniform, factor =   0.00000E+000
Temperature (C)        :    2.00000E+001
Pressure (ATM)         :    1.00000E+000
 Adjust Index Data To Environment  : Off
Effective Focal Length  :       -26084.67 (in air at system temperature and pressure)
Effective Focal Length  :       -26084.67 (in image space)
Back Focal Length       :         20.0595
Total Track             :            9000
Image Space F/#         :        6.210635
Paraxial Working F/#    :        6.210635
Working F/#             :        6.205384
Image Space NA          :      0.08024742
Object Space NA         :   2.099998e-007
Stop Radius             :            2100
Paraxial Image Height   :        6.828951
Paraxial Magnification  :               0
Entrance Pupil Diameter :            4200
Entrance Pupil Position :            9000
Exit Pupil Diameter     :        4186.358
Exit Pupil Position     :           26000
Field Type              : Angle in degrees
Maximum Radial Field    :           0.015
Primary Wavelength      :           0.65 µm
Lens Units              :   Millimeters
Angular Magnification   :        2.293153

Fields          : 4
Field Type: Angle in degrees
#        X-Value        Y-Value         Weight
 1       0.000000       0.000000       3.000000
 2       0.000000       0.005700       1.000000
 3       0.000000       0.011400       0.700000
 4       0.000000       0.015000       0.500000

Vignetting Factors
#       VDX       VDY       VCX       VCY       VAN
1  0.000000  0.000000  0.000000  0.000000  0.000000
2  0.000000  0.000000  0.000000  0.000000  0.000000
3  0.000000  0.000000  0.000000  0.000000  0.000000
4  0.000000  0.000000  0.000000  0.000000  0.000000

Wavelengths     : 3
Units: µm
#          Value         Weight
 1       0.650000       1.000000
 2       0.700000       1.000000
 3       0.750000       1.000000
```

SURFACE DATA SUMMARY:

Surf	Type	Radius	Thickness	Glass	Diameter	Conic	Comment

OBJ	STANDARD	Infinity	Infinity		0	0	
1	STANDARD	Infinity	9000		1400	0	
STO	STANDARD	-16000	-7430.997	MIRROR	4201	-1.082674	PRIMARY
3	STANDARD	Infinity	-19.05		320.89	0	Mounting fla
4	STANDARD	Infinity	-419.29		310.7318	0	
5	STANDARD	-138.719	-10.145	N-BK7	90	0	
6	STANDARD	-672.845	-0.9999922		90	0	
7	STANDARD	-81.42	-10.082	SF5	90	0	
8	STANDARD	-56.949	-92.23552		80	0	
9	STANDARD	Infinity	-14.79304		13.70345	0	Int FP
10	STANDARD	Infinity	-5.075	N-BK7	18	0	Field Flatte
11	STANDARD	18.417	-15.316		18	0	
12	STANDARD	-32.445	-2.073	N-SF10	21	0	
13	STANDARD	-15.647	-7.008	N-BAK1	21	0	
14	STANDARD	95.598	-9.360353		21	0	01LAO414_mod
15	STANDARD	Infinity	-21.20575		26.15273	0	Stop
16	STANDARD	107.187	-5.984	N-BAK4	23	0	01LAO511_mod
17	STANDARD	15.539	-1.728	N-SF10	23	0	
18	STANDARD	30.902	-96.54513		23	0	
19	STANDARD	-68.968	-3.059	N-BK7	25.4	0	Pupil Positi
20	STANDARD	Infinity	-20		25.4	0	
IMA	STANDARD	Infinity			13.79506	0	GWAVES Input

SURFACE DATA DETAIL:

Surface OBJ : STANDARD
Surface 1 : STANDARD
Surface STO : STANDARD PRIMARY
Mirror Substrate : Curved, Thickness = 8.40200E+001
Aperture : Floating Aperture
Maximum Radius : 2100.5
Surface 3 : STANDARD Mounting flange
Surface 4 : STANDARD
Surface 5 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 45
Surface 6 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 45
Surface 7 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 45
Surface 8 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 40
Surface 9 : STANDARD Int FP
Surface 10 : STANDARD Field Flattener
Aperture : Floating Aperture
Maximum Radius : 9
Surface 11 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 9
Surface 12 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 10.5
Surface 13 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 10.5
Surface 14 : STANDARD 01LAO414_mod
Aperture : Floating Aperture
Maximum Radius : 10.5
Surface 15 : STANDARD Stop
Surface 16 : STANDARD 01LAO511_mod
Aperture : Floating Aperture
Maximum Radius : 11.5
Surface 17 : STANDARD
Aperture : Floating Aperture
Maximum Radius : 11.5
Surface 18 : STANDARD
Aperture : Floating Aperture

```
 Maximum Radius :          11.5
Surface  19     : STANDARD Pupil Position
 Aperture       : Floating Aperture
 Maximum Radius :          12.7
Surface  20     : STANDARD
 Aperture       : Floating Aperture
 Maximum Radius :          12.7
Surface IMA     : STANDARD GWAVES Input

COATING DEFINITIONS:


EDGE THICKNESS DATA:

Surf           Edge
   1    8862.170946
 STO   -7293.167946
   3     -19.050000
   4    -426.791772
   5      -4.149719
   6     -13.059125
   7     -12.929114
   8     -75.822787
   9     -14.793042
  10      -2.726164
  11     -19.410846
  12      -4.373189
  13      -2.383419
  14      -9.938736
  15     -20.587049
  16      -1.514082
  17      -4.597078
  18     -99.944060
  19      -1.879605
  20     -20.000000
 IMA       0.000000

SOLVE AND VARIABLE DATA:

 Semi Diameter   1      : Fixed
 Semi Diameter   2      : Fixed
 Glass of   5           : Index offset by 0.000430, Abbe offset by 0.003000
 Semi Diameter   5      : Fixed
 Semi Diameter   6      : Fixed
 Glass of   7           : Index offset by 0.000370, Abbe offset by 0.030000
 Semi Diameter   7      : Fixed
 Semi Diameter   8      : Fixed
 Glass of  10           : Index offset by -0.000050, Abbe offset by 0.023000
 Semi Diameter  10      : Fixed
 Semi Diameter  11      : Fixed
 Glass of  12           : Index offset by 0.000410, Abbe offset by -0.033000
 Semi Diameter  12      : Fixed
 Glass of  13           : Index offset by 0.000080, Abbe offset by -0.139000
 Semi Diameter  13      : Fixed
 Semi Diameter  14      : Fixed
 Glass of  16           : Index offset by 0.000040, Abbe offset by 0.024000
 Semi Diameter  16      : Fixed
 Glass of  17           : Index offset by 0.000410, Abbe offset by -0.033000
 Semi Diameter  17      : Fixed
 Semi Diameter  18      : Fixed
 Glass of  19           : Index offset by -0.000050, Abbe offset by 0.023000
 Semi Diameter  19      : Fixed
 Semi Diameter  20      : Fixed

INDEX OF REFRACTION DATA:

System Temperature:   20.0000 Celsius
System Pressure   :    1.0000 Atmospheres
Absolute air index:    1.000272 at wavelength 0.650000 µm
Index data is relative to air at the system temperature and pressure.
```

Wavelengths are measured in air at the system temperature and pressure.

Surf	Glass	Temp	Pres	0.650000	0.700000	0.750000
0		20.00	1.00	1.00000000	1.00000000	1.00000000
1		20.00	1.00	1.00000000	1.00000000	1.00000000
2	MIRROR	20.00	1.00	1.00000000	1.00000000	1.00000000
3		20.00	1.00	1.00000000	1.00000000	1.00000000
4		20.00	1.00	1.00000000	1.00000000	1.00000000
5	N-BK7	20.00	1.00	1.51494851	1.51349105	1.51226252
6		20.00	1.00	1.00000000	1.00000000	1.00000000
7	SF5	20.00	1.00	1.66745549	1.66403717	1.66127839
8		20.00	1.00	1.00000000	1.00000000	1.00000000
9		20.00	1.00	1.00000000	1.00000000	1.00000000
10	N-BK7	20.00	1.00	1.51447126	1.51301552	1.51178840
11		20.00	1.00	1.00000000	1.00000000	1.00000000
12	N-SF10	20.00	1.00	1.72187624	1.71774604	1.71442042
13	N-BAK1	20.00	1.00	1.56979855	1.56805194	1.56660468
14		20.00	1.00	1.00000000	1.00000000	1.00000000
15		20.00	1.00	1.00000000	1.00000000	1.00000000
16	N-BAK4	20.00	1.00	1.56603407	1.56425248	1.56277357
17	N-SF10	20.00	1.00	1.72187624	1.71774604	1.71442042
18		20.00	1.00	1.00000000	1.00000000	1.00000000
19	N-BK7	20.00	1.00	1.51447126	1.51301552	1.51178840
20		20.00	1.00	1.00000000	1.00000000	1.00000000
21		20.00	1.00	1.00000000	1.00000000	1.00000000

THERMAL COEFFICIENT OF EXPANSION DATA:

Surf	Glass	TCE *10E-6
0		0.00000000
1		0.00000000
2	MIRROR	0.00000000
3		0.00000000
4		0.00000000
5	N-BK7	7.10000000
6		0.00000000
7	SF5	8.20000000
8		0.00000000
9		0.00000000
10	N-BK7	7.10000000
11		0.00000000
12	N-SF10	9.40000000
13	N-BAK1	7.60000000
14		0.00000000
15		0.00000000
16	N-BAK4	6.99000000
17	N-SF10	9.40000000
18		0.00000000
19	N-BK7	7.10000000
20		0.00000000
21		0.00000000

GLOBAL VERTEX COORDINATES, ORIENTATIONS, AND ROTATION/OFFSET MATRICES:

Reference Surface: 2

Surf	R11	R12	R13	X	
	R21	R22	R23	Y	
	R31	R32	R33	Z	
1	1.0000000000	0.0000000000	0.0000000000	0.000000000E+000	
	0.0000000000	1.0000000000	0.0000000000	0.000000000E+000	
	0.0000000000	0.0000000000	1.0000000000	-9.000000000E+003	
2	1.0000000000	0.0000000000	0.0000000000	0.000000000E+000	PRIMARY
	0.0000000000	1.0000000000	0.0000000000	0.000000000E+000	
	0.0000000000	0.0000000000	1.0000000000	0.000000000E+000	
3	1.0000000000	0.0000000000	0.0000000000	0.000000000E+000	Mounting flange
	0.0000000000	1.0000000000	0.0000000000	0.000000000E+000	

```
     0.0000000000   0.0000000000   1.0000000000 -7.430997000E+003

 4   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.450047000E+003

 5   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.869337000E+003

 6   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.879482000E+003

 7   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.880481992E+003

 8   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.890563992E+003

 9   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 Int FP
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.982799516E+003

10   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 Field Flattener
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -7.997592558E+003

11   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.002667558E+003

12   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.017983558E+003

13   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.020056558E+003

14   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 01LAO414_mod
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.027064558E+003

15   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 Stop
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.036424911E+003

16   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 01LAO511_mod
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.057630658E+003

17   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.063614658E+003

18   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.065342658E+003

19   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000 Pupil Position
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.161887785E+003

20   1.0000000000   0.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   1.0000000000   0.0000000000  0.000000000E+000
     0.0000000000   0.0000000000   1.0000000000 -8.164946785E+003
```

21	1.0000000000	0.0000000000	0.0000000000	0.000000000E+000 GWAVES Input
	0.0000000000	1.0000000000	0.0000000000	0.000000000E+000
	0.0000000000	0.0000000000	1.0000000000	-8.184946785E+003

GLOBAL SURFACE CENTER OF CURVATURE POINTS:

Reference Surface: 2

Surf	X	Y	Z	
1	-	-	-	
2	0.0000000000	0.0000000000	-16000.0000000000	PRIMARY
3	-	-	-	Mounting flange
4	-	-	-	
5	0.0000000000	0.0000000000	-8008.0560000000	
6	0.0000000000	0.0000000000	-8552.3270000000	
7	0.0000000000	0.0000000000	-7961.9019921634	
8	0.0000000000	0.0000000000	-7947.5129921634	
9	-	-	-	Int FP
10	-	-	-	Field Flattener
11	0.0000000000	0.0000000000	-7984.2505581131	
12	0.0000000000	0.0000000000	-8050.4285582485	
13	0.0000000000	0.0000000000	-8035.7035582485	
14	0.0000000000	0.0000000000	-7931.4665582485	01LAO414_mod
15	-	-	-	Stop
16	0.0000000000	0.0000000000	-7950.4436584539	01LAO511_mod
17	0.0000000000	0.0000000000	-8048.0756584539	
18	0.0000000000	0.0000000000	-8034.4406584539	
19	0.0000000000	0.0000000000	-8230.8557851180	Pupil Position
20	-	-	-	
21	-	-	-	GWAVES Input

ELEMENT VOLUME DATA:

For centered elements with plane or spherical circular faces, exact volumes are computed by assuming edges are squared up to the larger of the front and back radial aperture.

For all other elements, approximate volumes are numerically integrated to 0.1% accuracy. Zero volume means the volume cannot be accurately computed.

Single elements that are duplicated in the Lens Data Editor for ray tracing purposes may be listed more than once yielding incorrect total mass estimates.

	Volume cc	Density g/cc	Mass g
Element surf 5 to 6	45.688796	2.510000	114.678877
Element surf 7 to 8	83.144321	4.070000	338.397385
Element surf 10 to 11	0.999362	2.510000	2.508399
Element surf 12 to 13	1.084455	3.050000	3.307588
Element surf 13 to 14	1.661195	3.190000	5.299212
Element surf 16 to 17	1.626503	3.046000	4.954328
Element surf 17 to 18	1.250691	3.050000	3.814608
Element surf 19 to 20	1.252073	2.510000	3.142704
Total Mass:			476.103100

F/# DATA:

F/# calculations consider vignetting factors and ignore surface apertures.

	Wavelength:	0.650000		0.700000		0.750000	
#	Field	Tan	Sag	Tan	Sag	Tan	Sag
1	0.0000 deg:	6.2054	6.2054	6.1946	6.1946	6.1863	6.1863
2	0.0057 deg:	6.2187	6.2097	6.2078	6.1989	6.1993	6.1905
3	0.0114 deg:	6.2592	6.2231	6.2479	6.2121	6.2391	6.2035
4	0.0150 deg:	6.2997	6.2365	6.2881	6.2253	6.2788	6.2166

CARDINAL POINTS:

Object space positions are measured with respect to surface 1.

Image space positions are measured with respect to the image surface.
The index in both the object space and image space is considered.

	Object Space	Image Space
W = 0.650000 (Primary)		
Focal Length	26084.668898	26084.668898
Focal Planes	-50816.143050	0.059497
Principal Planes	-76900.811948	-26084.609401
Anti-Principal Planes	-24731.474152	26084.728395
Nodal Planes	-24731.474152	26084.728395
Anti-Nodal Planes	-76900.811948	-26084.609401
W = 0.700000		
Focal Length	26039.634833	26039.634833
Focal Planes	-66795.786229	0.080980
Principal Planes	-92835.421062	-26039.553853
Anti-Principal Planes	-40756.151397	26039.715813
Nodal Planes	-40756.151397	26039.715813
Anti-Nodal Planes	-92835.421062	-26039.553853
W = 0.750000		
Focal Length	26004.478314	26004.478314
Focal Planes	-80420.998456	-0.016234
Principal Planes	-106425.476770	-26004.494548
Anti-Principal Planes	-54416.520143	26004.462079
Nodal Planes	-54416.520143	26004.462079
Anti-Nodal Planes	-106425.476770	-26004.494548

PHYSICAL OPTICS PROPAGATION SETTINGS SUMMARY:

OBJ STANDARD
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

1 STANDARD
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

STO STANDARD PRIMARY
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

3 STANDARD Mounting flange
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

4 STANDARD
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

5 STANDARD
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off
- Use Angular Spectrum Propagator : Off
- Output Pilot Radius : Best Fit

6 STANDARD
- Use Rays To Propagate To Next Surface : Off
- Recompute Pilot Beam : Off
- Do Not Rescale Beam Size Using Ray Data: Off

```
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
 7 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
 8 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
 9 STANDARD              Int FP
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
10 STANDARD      Field Flattener
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
11 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
12 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
13 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
14 STANDARD         01LAO414_mod
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
15 STANDARD                 Stop
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
16 STANDARD         01LAO511_mod
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
17 STANDARD
  Use Rays To Propagate To Next Surface  : Off
  Recompute Pilot Beam                   : Off
  Do Not Rescale Beam Size Using Ray Data: Off
  Use Angular Spectrum Propagator        : Off
  Output Pilot Radius                    : Best Fit
18 STANDARD
  Use Rays To Propagate To Next Surface  : Off
```

```
    Recompute Pilot Beam                   : Off
    Do Not Rescale Beam Size Using Ray Data: Off
    Use Angular Spectrum Propagator        : Off
    Output Pilot Radius                    : Best Fit
  19 STANDARD       Pupil Position
    Use Rays To Propagate To Next Surface  : Off
    Recompute Pilot Beam                   : Off
    Do Not Rescale Beam Size Using Ray Data: Off
    Use Angular Spectrum Propagator        : Off
    Output Pilot Radius                    : Best Fit
  20 STANDARD
    Use Rays To Propagate To Next Surface  : Off
    Recompute Pilot Beam                   : Off
    Do Not Rescale Beam Size Using Ray Data: Off
    Use Angular Spectrum Propagator        : Off
    Output Pilot Radius                    : Best Fit
 IMA STANDARD         GWAVES Input
    Use Rays To Propagate To Next Surface  : Off
    Recompute Pilot Beam                   : Off
    Do Not Rescale Beam Size Using Ray Data: Off
    Use Angular Spectrum Propagator        : Off
    Output Pilot Radius                    : Best Fit

FILES USED:

ZEMAX File
  C:\TBIDA\ZEMAX\ZEMAX\DCT\RC\RC_D11\GWAVES_AS_BUILT\PF_2EL_F6_REIMAGER2_DCT_AS-BUILT_TOL_WITH_FLANGE.ZMX
Session File
  C:\TBIDA\ZEMAX\ZEMAX\DCT\RC\RC_D11\GWAVES_AS_BUILT\PF_2EL_F6_REIMAGER2_DCT_AS-BUILT_TOL_WITH_FLANGE.SES
Glass Catalogs
  C:\PROGRAM FILES\ZEMAX\GLASSCAT\SCHOTT.AGF
  C:\PROGRAM FILES\ZEMAX\GLASSCAT\INFRARED.AGF
  C:\PROGRAM FILES\ZEMAX\GLASSCAT\OHARA.AGF
Coating Data
  C:\PROGRAM FILES\ZEMAX\COATINGS\COATING.DAT
```