



VLX	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
VUY	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
VLY	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
POL	N					

APERTURE DATA/EDGE DEFINITIONS

CA  
 CIR S1 OBS 487.500000  
 CIR S2 1250.000000

REFRACTIVE INDICES

GLASS CODE	1000.00	900.00	800.00	700.00	600.00	555.00	520.00
	480.00	440.00	400.00	380.00	360.00		
SILICA_SPEC	1.450416	1.451753	1.453318	1.455294	1.458041	1.459707	1.461285
	1.463507	1.466355	1.470122	1.472490	1.475294		
LLF6_SCHOTT	1.520140	1.521839	1.523963	1.526826	1.531045	1.533704	1.536279
	1.539986	1.544867	1.551544	1.555880	1.561163		
NBK7_SCHOTT	1.507502	1.508997	1.510776	1.513064	1.516295	1.518274	1.520160
	1.522829	1.526269	1.530849	1.533745	1.537190		

No solves defined in system

No pickups defined in system

This is a non-symmetric system. If elements with power are decentered or tilted, the first order properties are probably inadequate in describing the system characteristics.

INFINITE CONJUGATES

EFL -15922.3816  
 BFL -130.0076  
 FFL -94739.6238  
**FNO 6.3690**  
 IMG DIS -130.0000  
 OAL -722.1566

PARAXIAL IMAGE HT 194.5383  
 ANG 0.7000  
 ENTRANCE PUPIL DIA 2500.0000  
 THI 2842.0000  
 EXIT PUPIL DIA 407.9247  
 THI 2468.0454

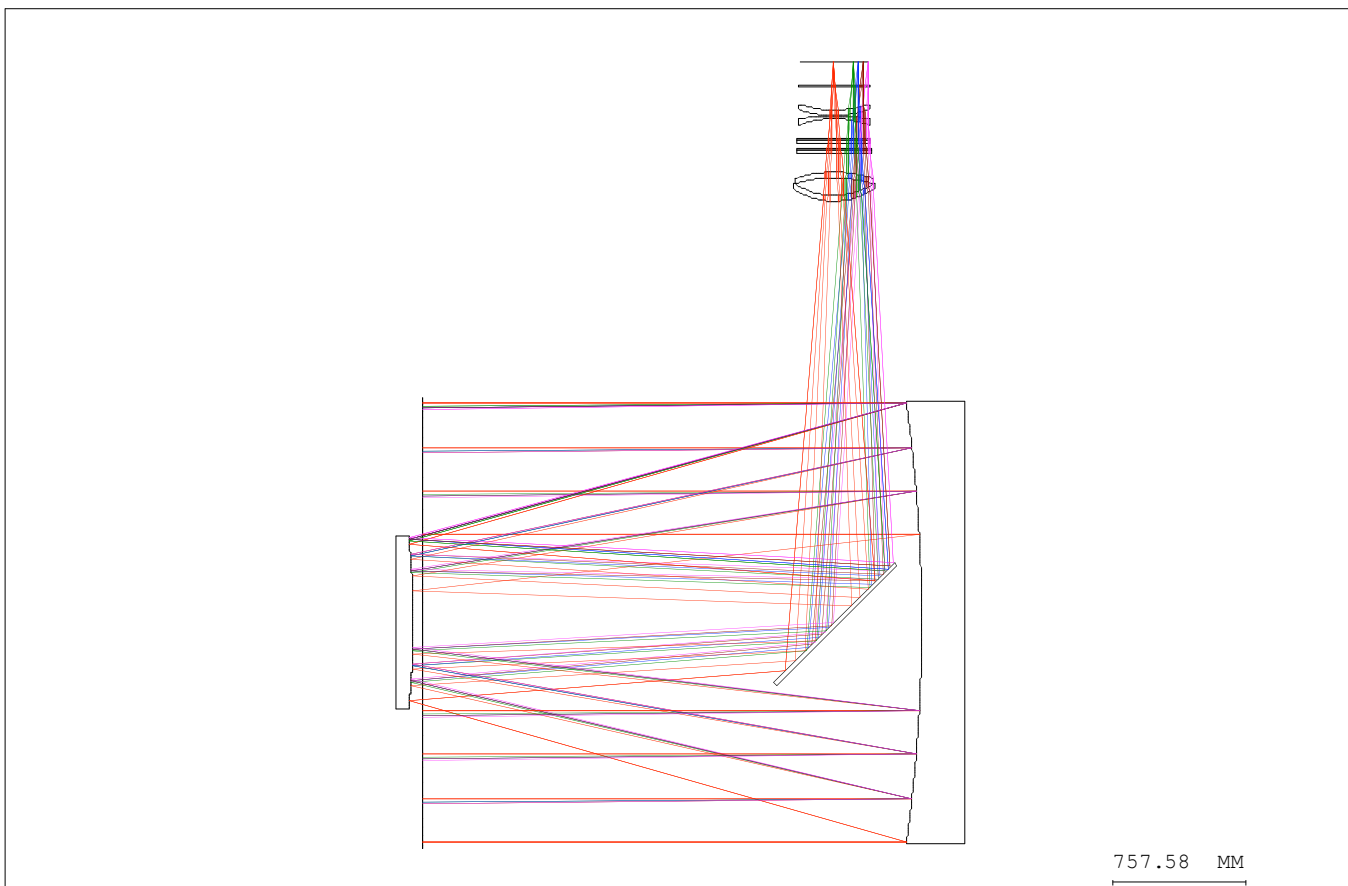
cli sa Aperture specifications - ray traced and user defined

SURF CA OFF CA ON APERTURES FOR EACH ZOOM POSITION BASED ON  
 UPPER, LOWER, AND CHIEF RAYS (Y-FAN)

1	1284.7233	1284.7233	1284.7233
STO	1250.0000	1250.0000	1250.0000
3	484.3780	484.3780	484.3780
4	479.4622	479.4622	479.4622
5	226.9407	226.9407	226.9407
6	220.2028	220.2028	220.2028
7	220.0135	220.0135	220.0135
8	221.4202	221.4202	221.4202
9	209.0018	209.0018	209.0018
10	208.1305	208.1305	208.1305
11	207.3012	207.3012	207.3012
12	205.1773	205.1773	205.1773
13	204.3480	204.3480	204.3480
14	203.4767	203.4767	203.4767
15	197.1424	197.1424	197.1424
16	199.1098	199.1098	199.1098
17	199.6818	199.6818	199.6818
18	196.5881	196.5881	196.5881
19	196.1997	196.1997	196.1997
20	196.1749	196.1749	196.1749
IMG	195.6959	195.6959	195.6959

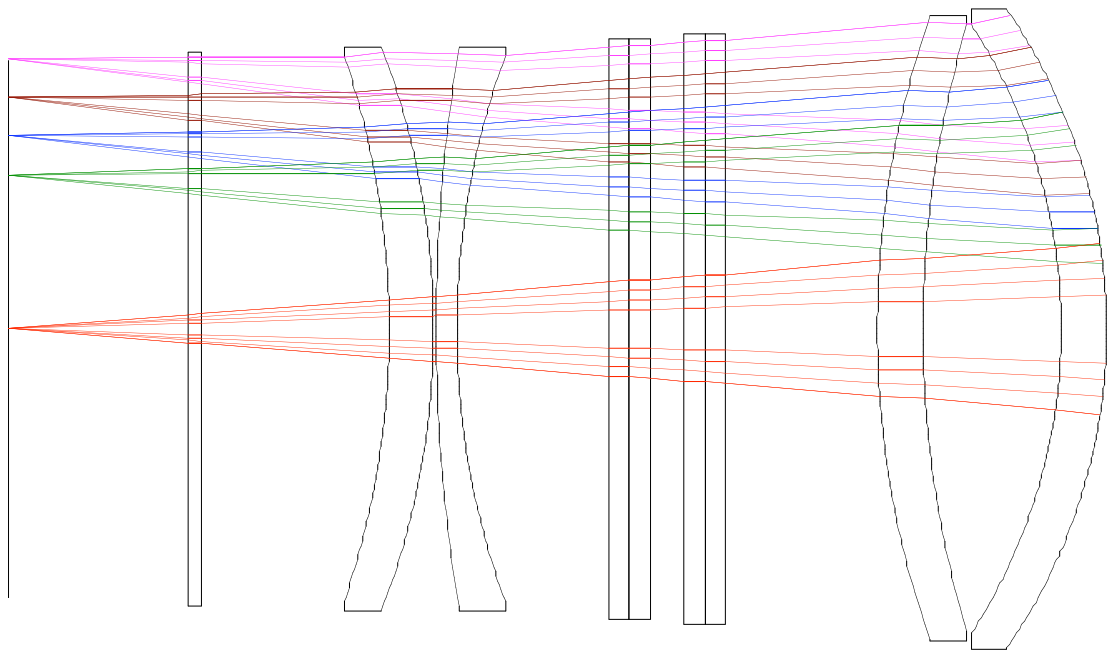
Optimization File

```
frz sa  
kc s2 2  
ac s2 2;bc s2 2;cc s2 2;dc s2 2;ec s2 2;!fc s2 2  
ccy s3 3  
kc s3 3  
ac s3 3;bc s3 3;cc s3 3;dc s3 3  
ccy s5 5;ccy s6 5  
ccy s7 7  
ccy s8 8  
ccy s15 15  
ccy s16 16  
ccy s17 -15  
ccy s18 18  
thc s8 8;thc s14 8  
thc s18 18  
der def  
aut  
mnc 25  
thi s18 <-50  
efl >-16000  
obs .4  
go  
rim;go
```



2.5 m f/6.35

Scale: 0.03 EMP 26-Mar-07



96.15 MM

2.5 m f/6.35

Scale: 0.26 EMP 26-Mar-07

2.5 m f/6.35

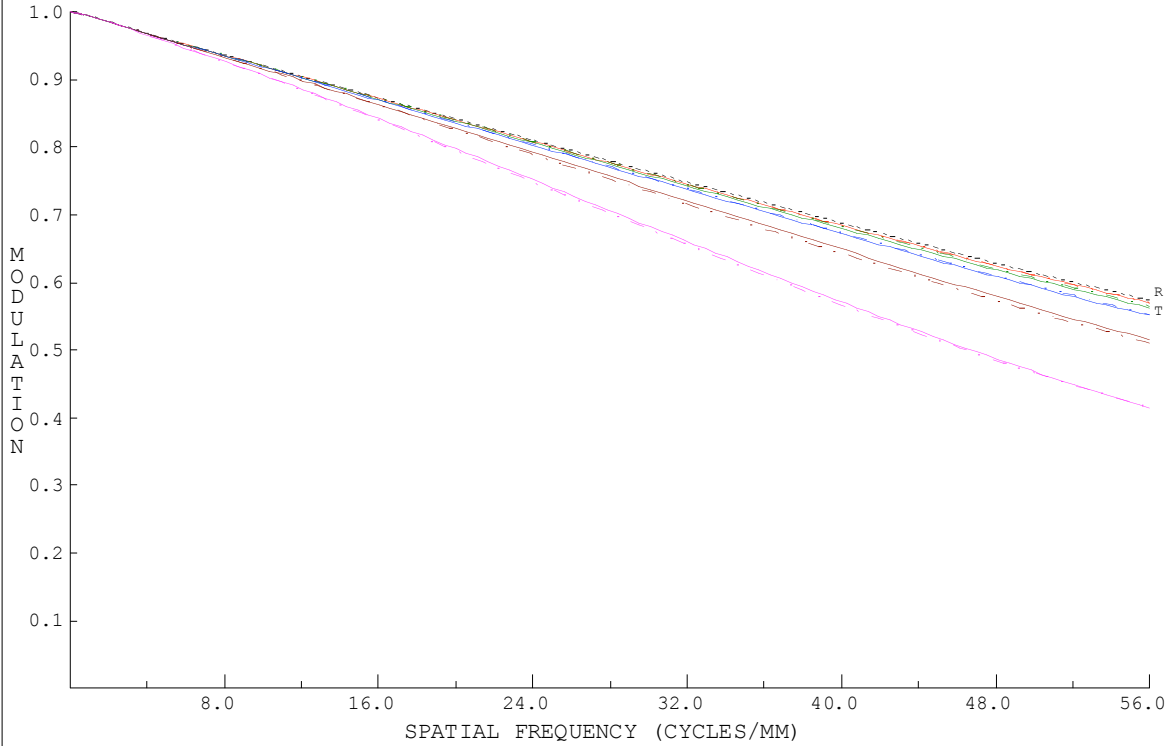
DIFFRACTION MTF

EMP

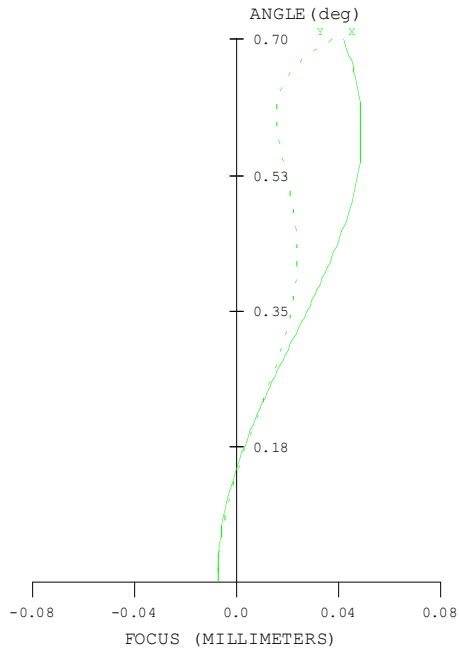
26-Mar-07

DIFFRACTION LIMIT		WAVELENGTH WEIGHT	
---	0.0 FIELD ( 0.00° )	1000.0 NM	1
---	0.6 FIELD ( 0.40° )	900.0 NM	1
---	0.7 FIELD ( 0.50° )	800.0 NM	1
---	0.9 FIELD ( 0.60° )	700.0 NM	1
---	1.0 FIELD ( 0.70° )	600.0 NM	1
---		555.0 NM	1
---		520.0 NM	1
---		480.0 NM	1
---		440.0 NM	1
---		400.0 NM	1
---		380.0 NM	1
---		360.0 NM	1

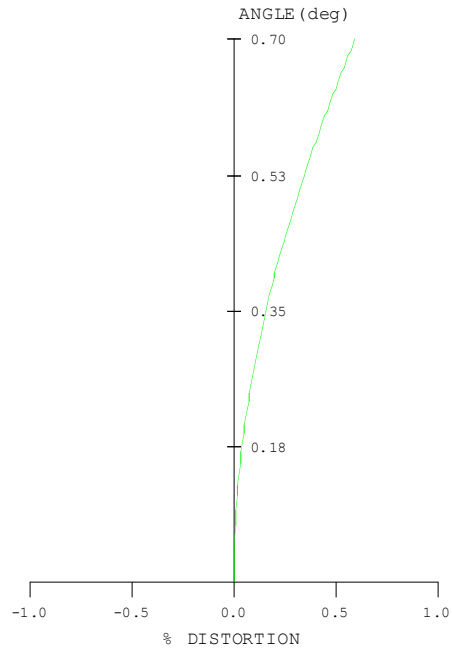
DEFOCUSING 0.00000



ASTIGMATIC FIELD CURVES

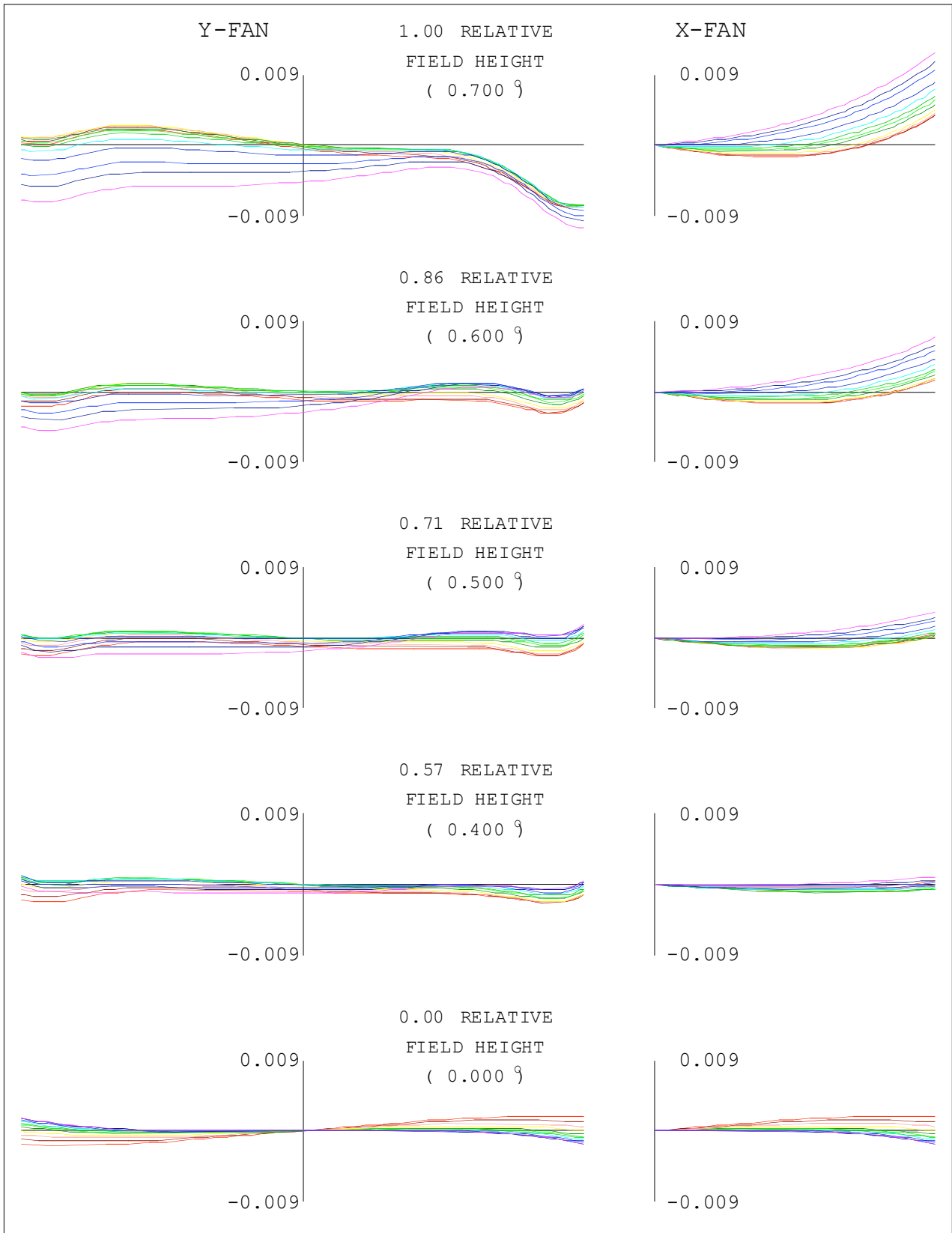


DISTORTION



2.5 m f/6.35

EMP 26-Mar-07



2.5 m f/6.35

RAY ABERRATIONS ( MILLIMETERS )

EMP

26-Mar-07

- 1000.0000 NM
- 900.0000 NM
- 800.0000 NM
- 700.0000 NM
- 600.0000 NM
- 555.0000 NM
- 520.0000 NM
- 480.0000 NM
- 440.0000 NM
- 400.0000 NM
- 380.0000 NM
- 360.0000 NM

