



Retinal imaging lens

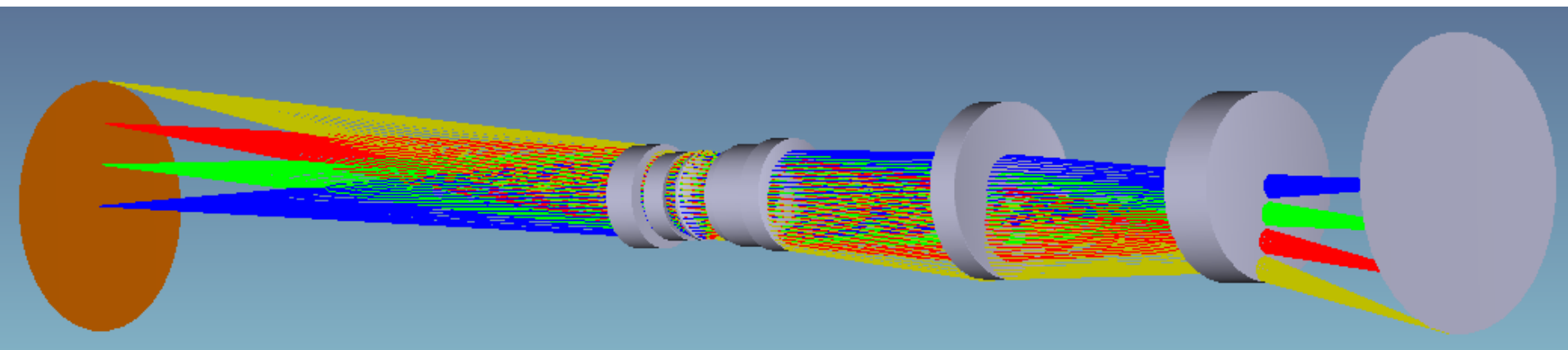
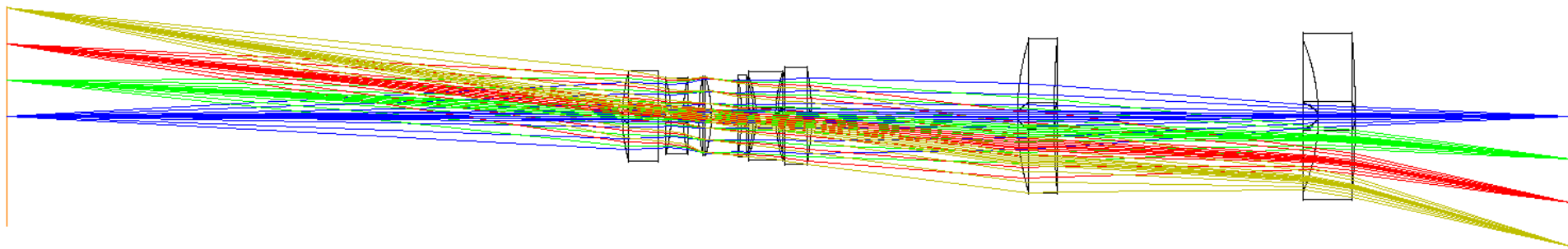
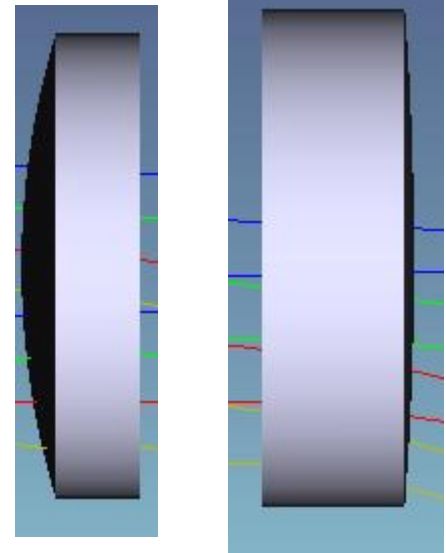
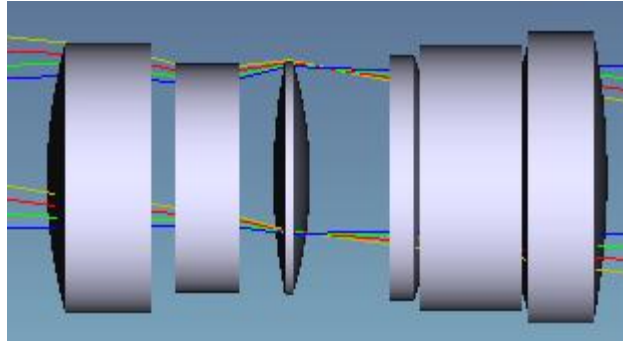
Preliminary

Lens info

- Wavelength range $0.4\sim 1\mu\text{m}$
 - Bonus: lens can work up to $\sim 1.6\mu\text{m}$
- Distance from object: 200mm
- Back focal distance: 70mm
- Aperture: 50mm
- Field: up to $\pm 9^\circ$
- Image size: $\pm 42\text{mm}$

Optical layout

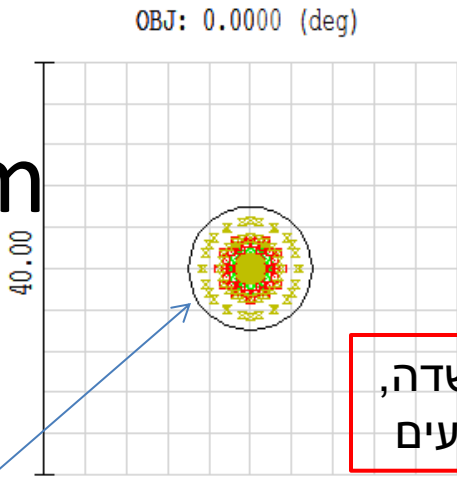
- 8 lenses
- all spherical



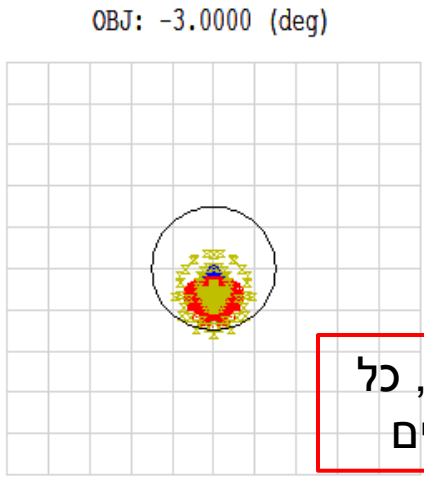
Spot diagram

+ 0.4500
 × 0.6200
 □ 0.7800
 × 0.9500

אורכי גל

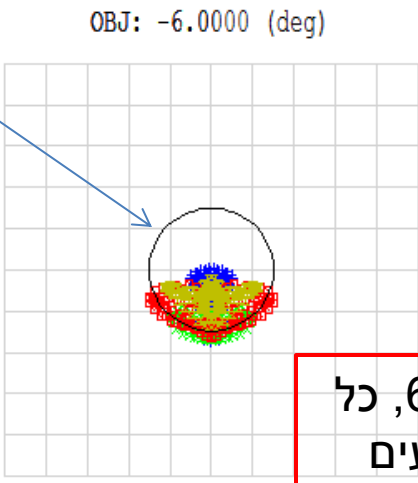


מרכז השדה,
 כל הצבעים

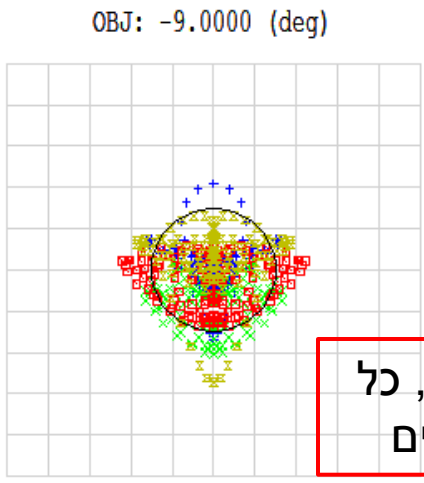


זווית 3°, כל
 הצבעים

העיגול מציין
 את מגבלת
 העקיפה, 6µm



זווית 6°, כל
 הצבעים



זווית 9°, כל
 הצבעים

Surface: IMA

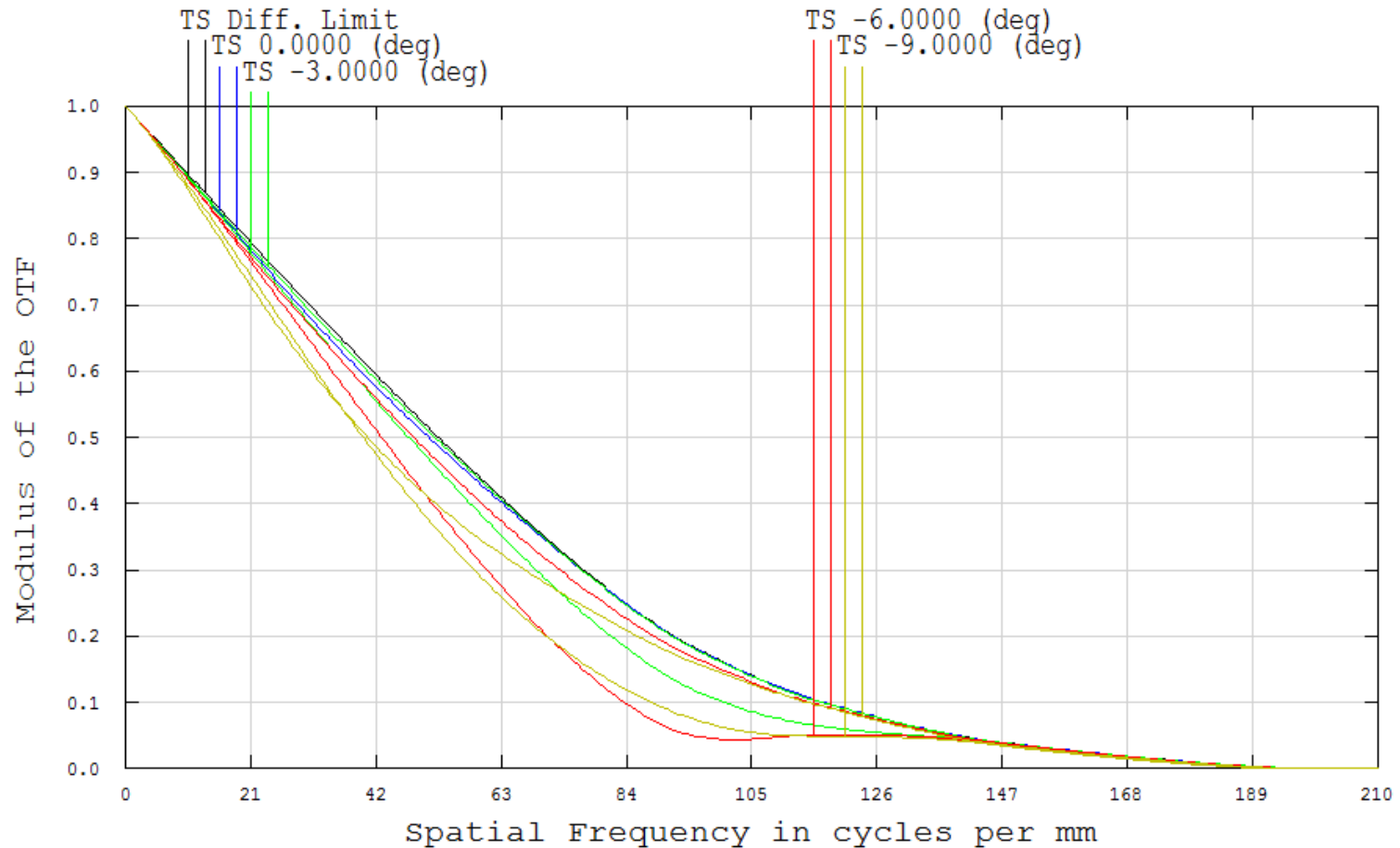
Spot Diagram

3/16/2017 Units are µm.

	גודל כל spot			
	1	2	3	4
RMS radius	1.698	3.075	4.506	4.619
GEO radius	4.678	6.402	7.140	10.921

Airy Radius: 5.981 µm
 Reference : Chief Ray
 Scale bar : 40

MTF graph



Polychromatic Diffraction MTF

3/16/2017
Data for 0.4500 to 0.9500 μm .
Surface: Image

APO_200LST_3_29.ZMX
Configuration 1 of 1

Glass materials from Schott

