Lens Design Archive

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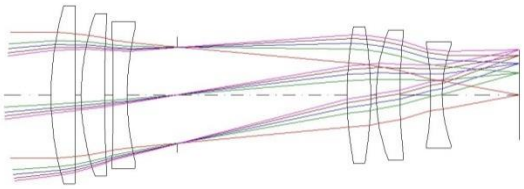
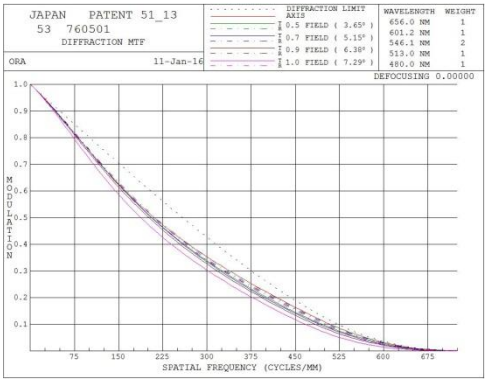
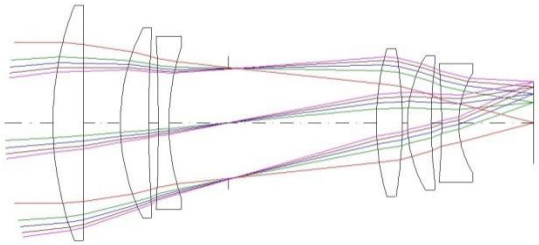
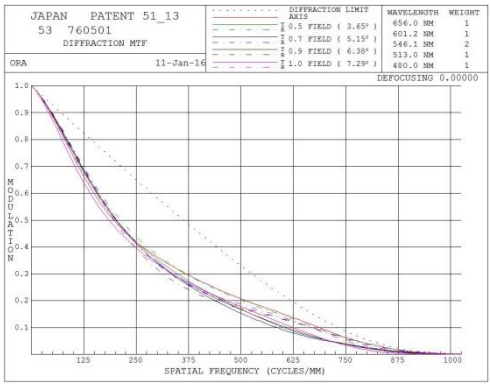
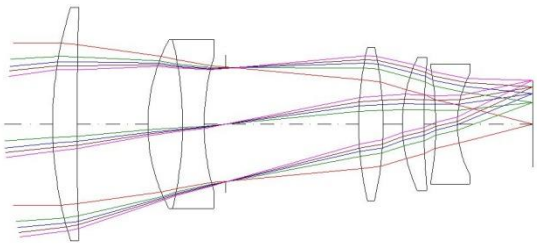
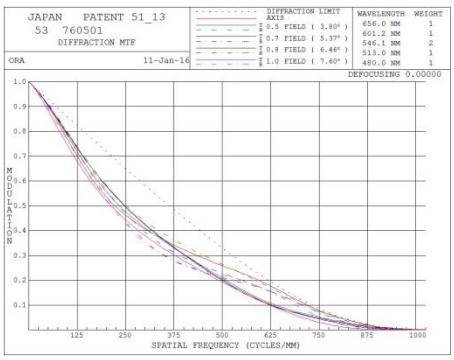
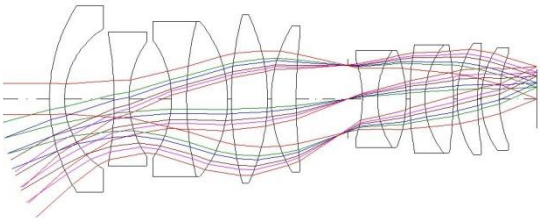
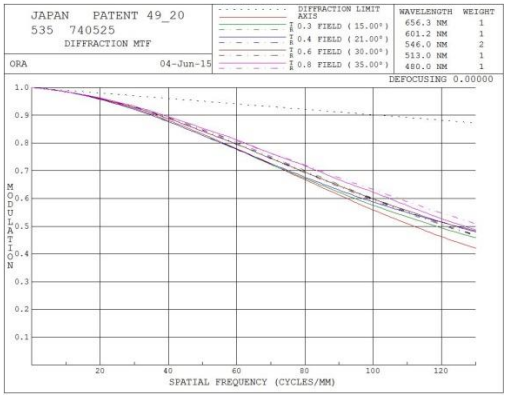
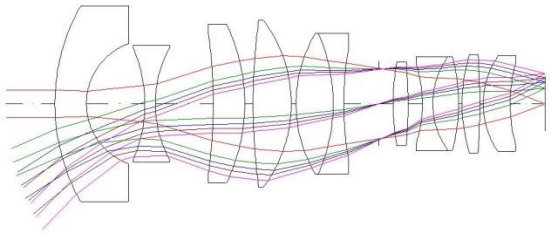
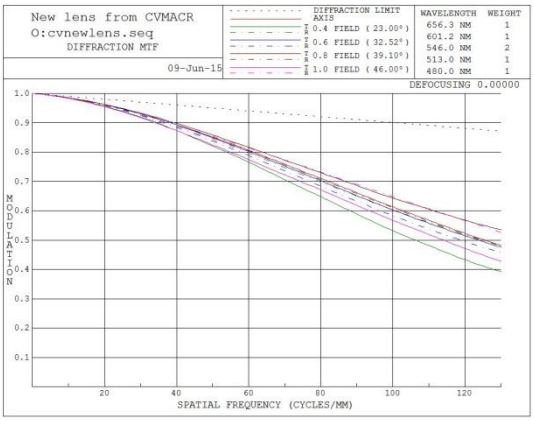
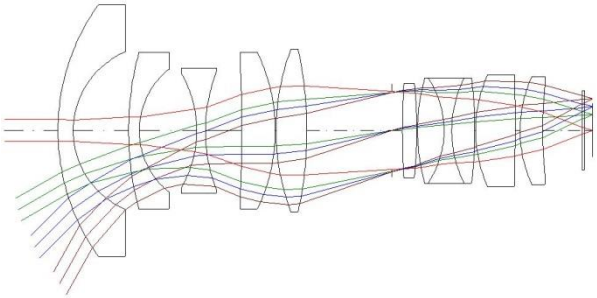
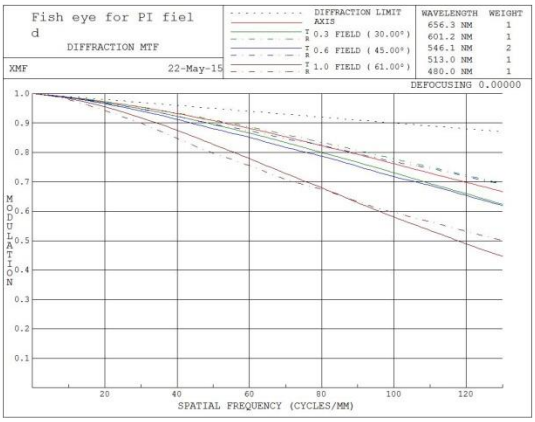
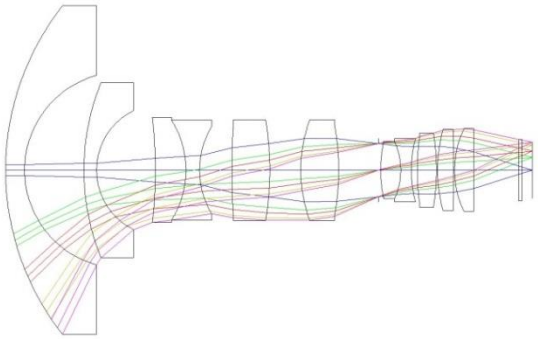
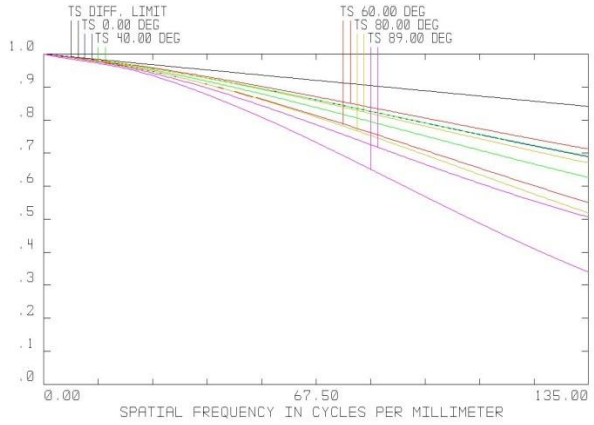
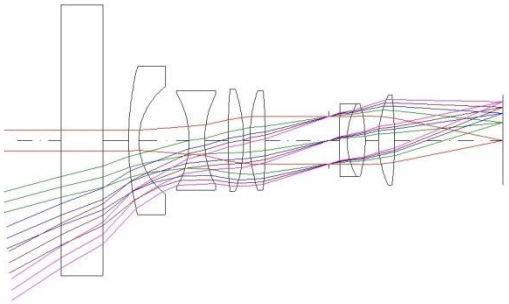
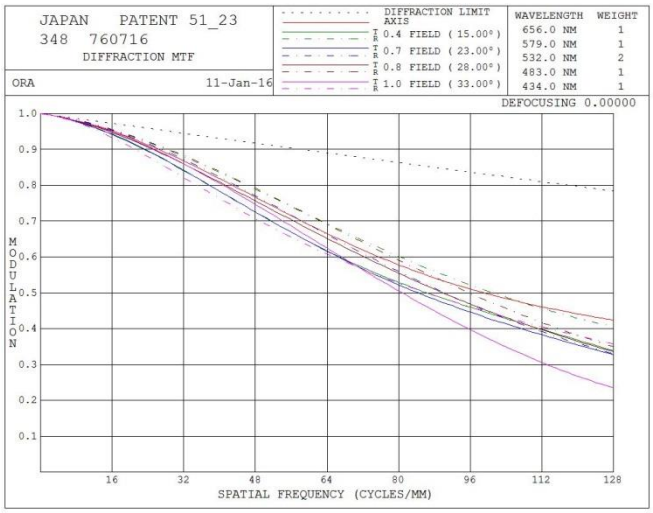
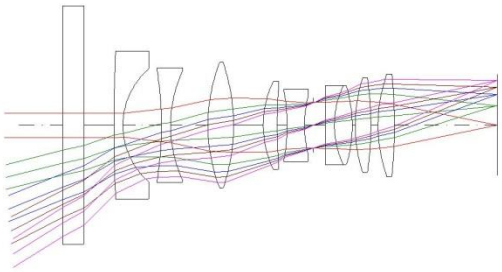
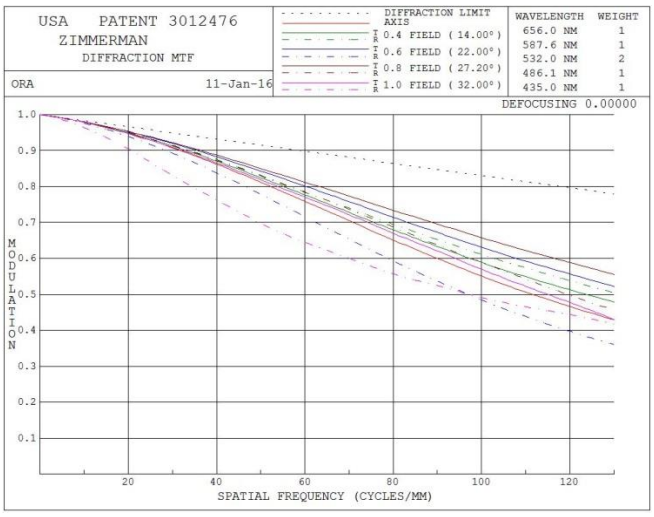
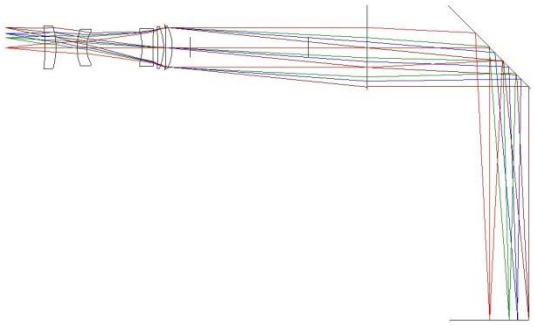
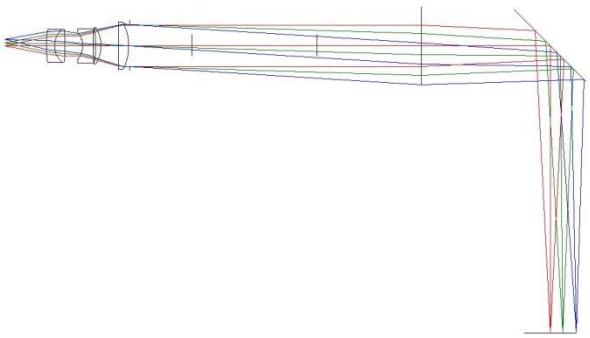
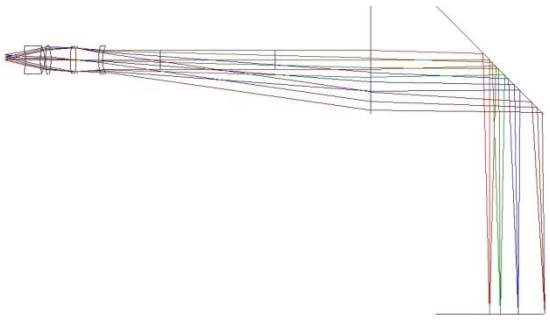
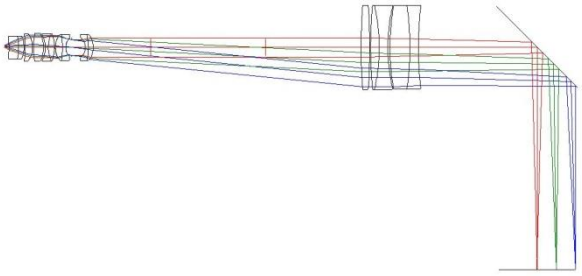
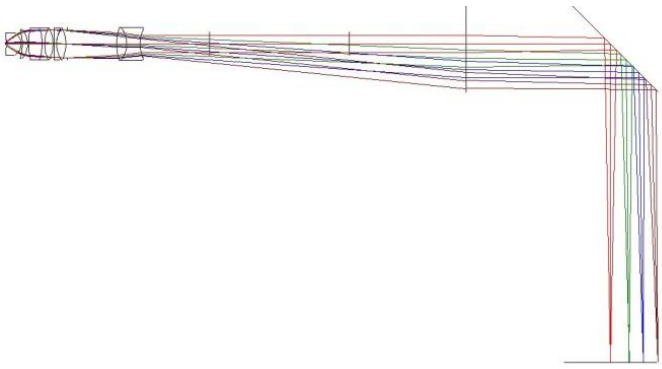
NAME	Petzval portrait lenses	
wavelengths	480-656nm visible	
EFFL	30mm	
F/#	2.8/2.0	
FOV	15°	
Layout & MTF CodeV model	 F/#=2.8	
	 F/#=2	
	 F/#=2	

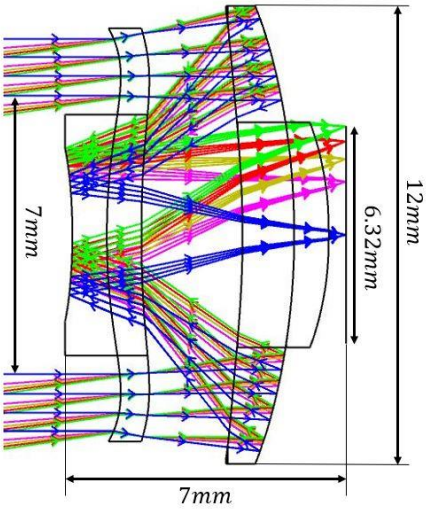
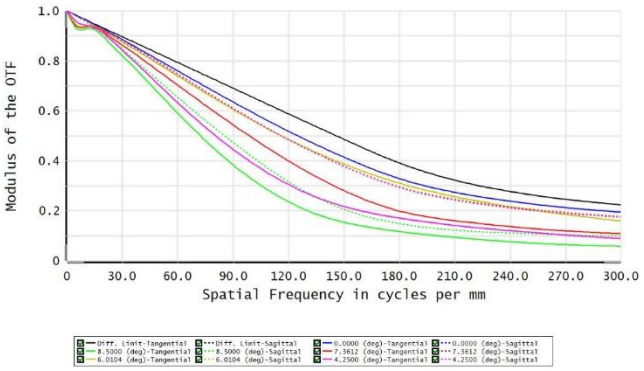
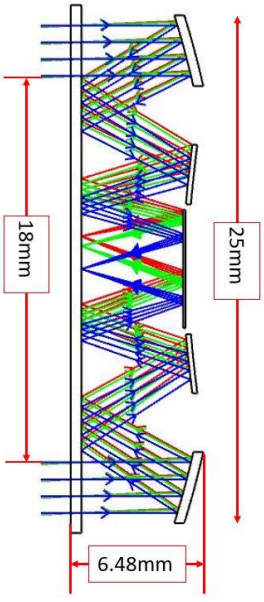
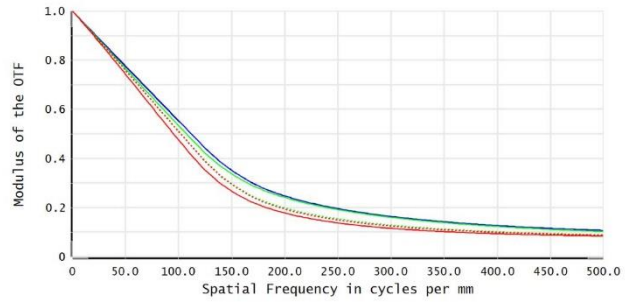
NAME	Wide_angle_lenses	
wavelengths	480-656nm visible	
EFFL	5.8mm/5.45mm/4.0mm	
F/#	1.4/2.0	
FOV	84°/92°/122°	
Elements number	9	
Layout&MTF CodeV model	 84° F/#=1.4 135 lp/mm	
	 92° F/#=1.4 135 lp/mm	
	 122° F/#=1.4 135lp/mm	

NAME	Fisheye_lens	
wavelengths	480-656nm visible	
EFFL	1.7mm	
F/#	1.6	
FOV	180°	
Elements number	9	
Layout&MTF Zemax model	 135 lp/mm	

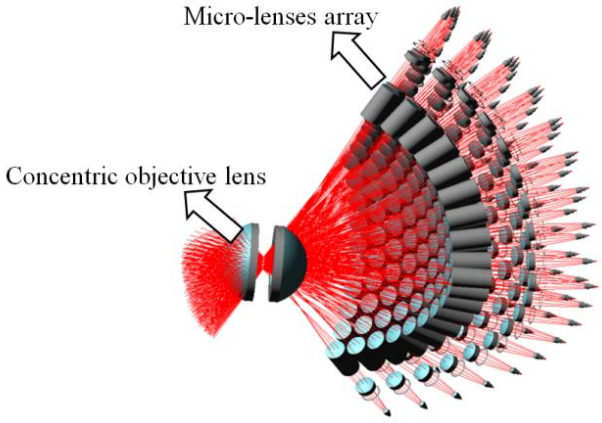
NAME	Underwater Lenses	
wavelengths	434-656nm visible	
EFFL	10mm	
F/#	2.5	
FOV	66°	
Elements number	6	
Layout&MTF CodeV model	 135 lp/mm	
	 135 lp/mm	

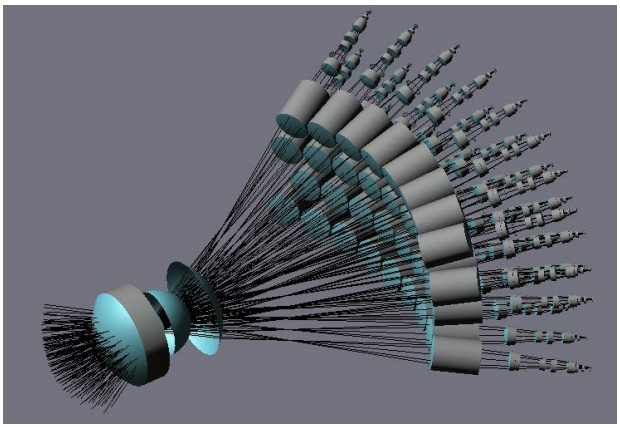
NAME	Microscope Objectives
wavelengths	450-680nm visible
EFFL	100/50/20/10/5mm
NA	0.1/0.2/0.25/0.5/0.75
FOV(height)	10/5/2/1/0.5mm
Elements number	5-6
Layout CodeV model	 2X  4X  10X  20X  40X

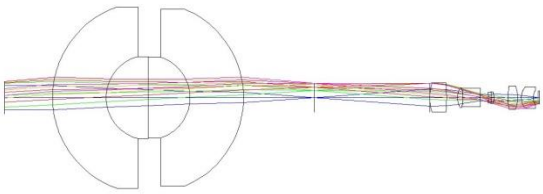
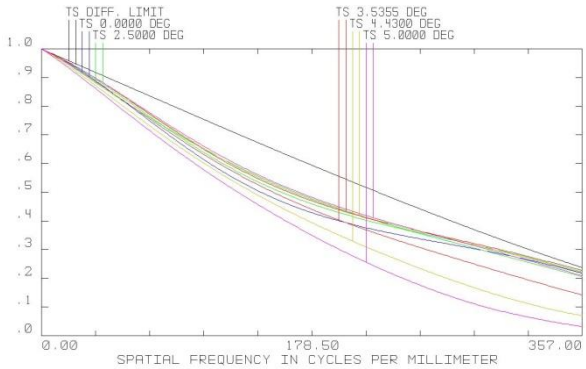
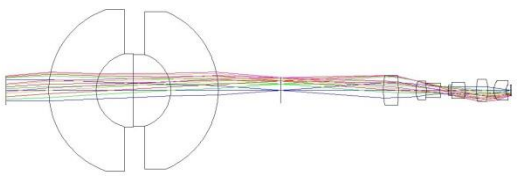
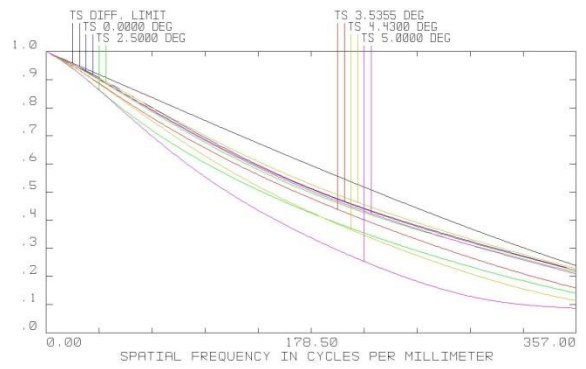
Ultrathin lenses

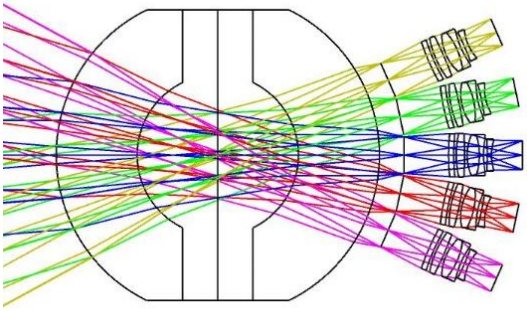
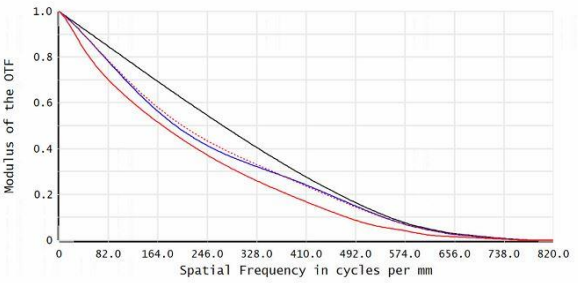
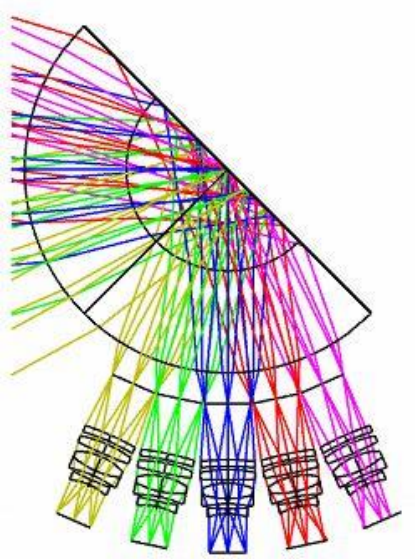
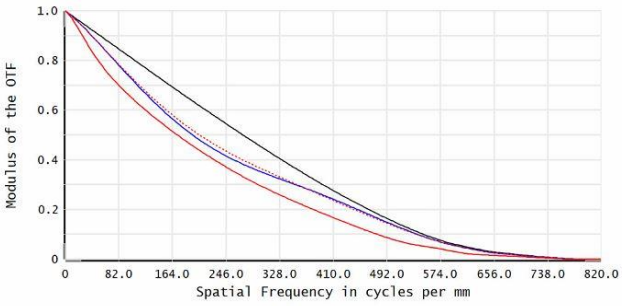
NAME	Ultrathin Lenses	
wavelengths	434-656nm visible	
EFFL	20mm & 30mm	
F/#	2 & 1.73	
FOV	17° & 5°	
Layout&MTF Zemax model		
		

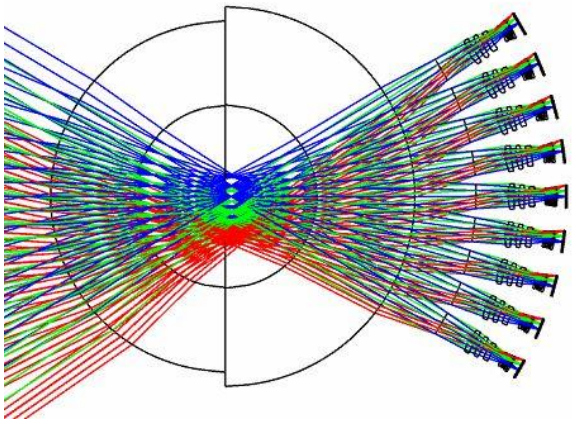
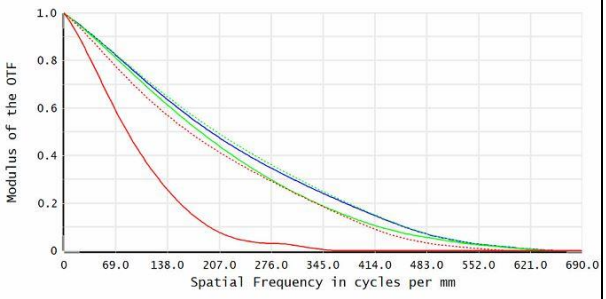
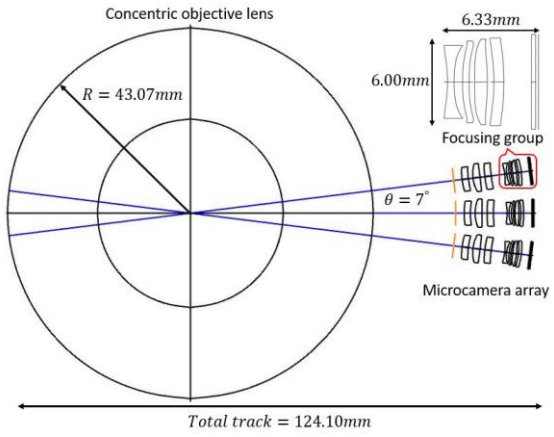
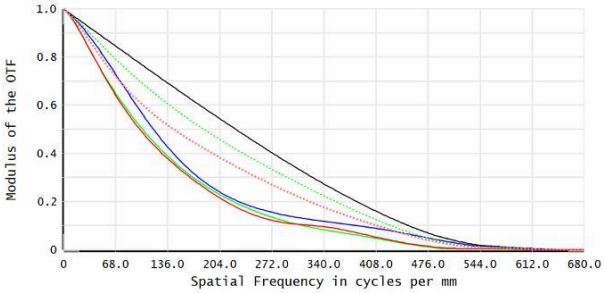
MULTISCALE Lenses

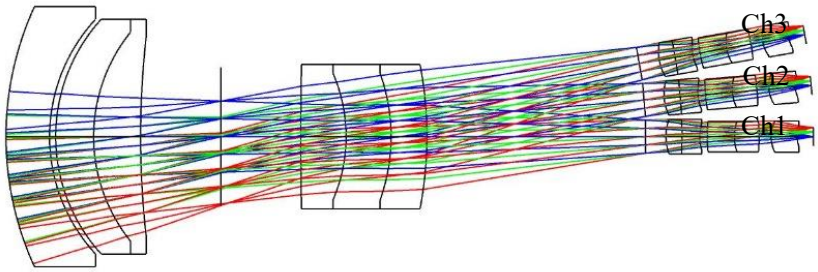


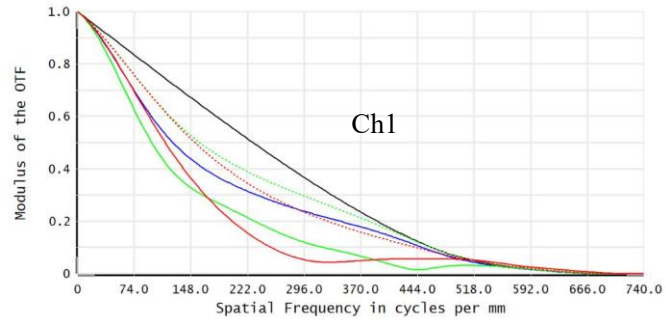
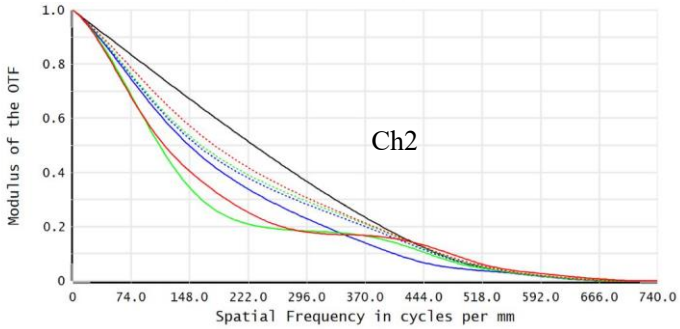
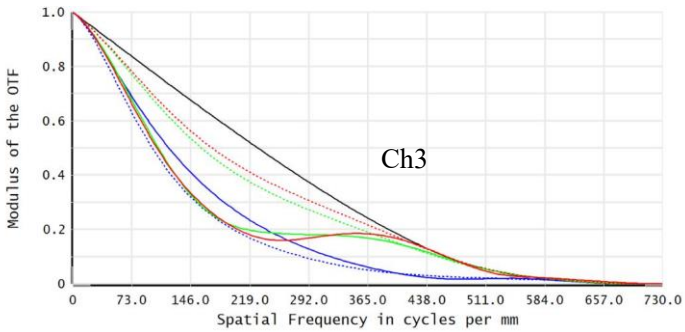


NAME	Monocentric Multiscale lenses of Keplerian style	
wavelengths	434-656nm visible	
EFFL	31mm	
F/#	3	
MFOV	10°（FoV of a single channel)	
Layout&MTF Zemax& CodeV model	 357 lp/mm	
	 357 lp/mm	

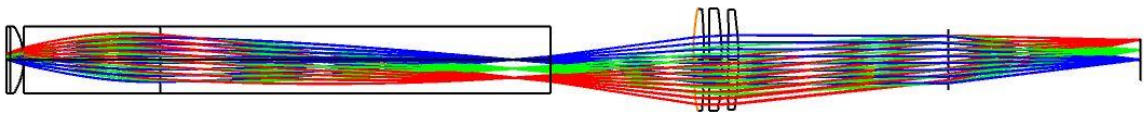
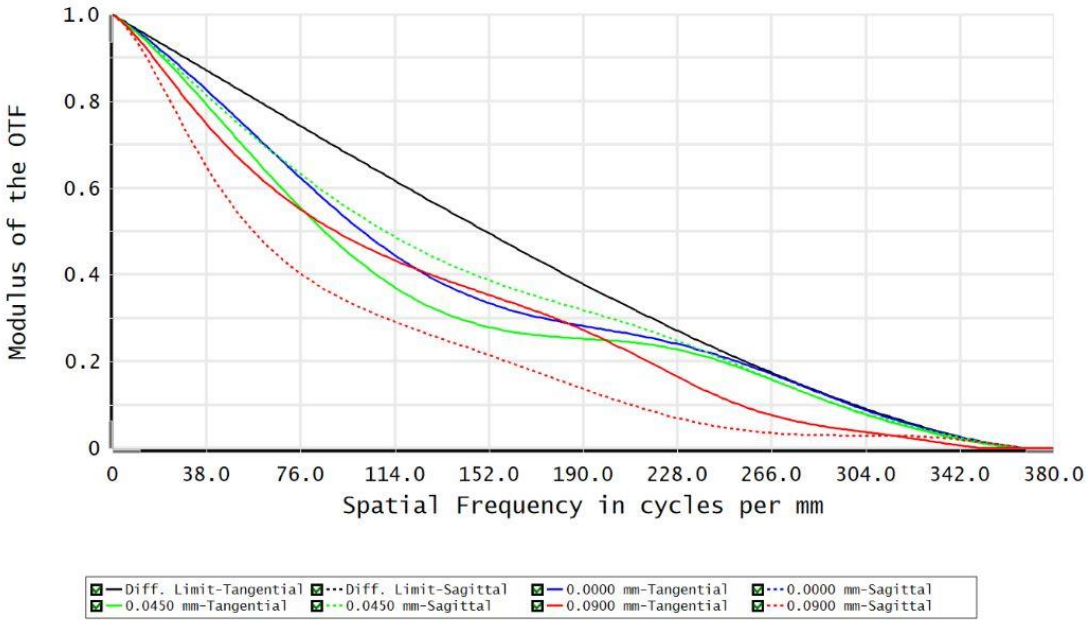
NAME	Monocentric Multiscale lenses of Galilean style	
wavelengths	434-656nm visible	
EFFL	34mm	
F/#	2.5	
MFOV	9.6°	
Layout&MTF Zemax model		
		

NAME	Multiscale Lenses with VCM based focusing	
wavelengths	434-656nm visible	
EFFL	50mm/45mm	
F/#	2.5	
MFOV	9.6°	
Layout&MTF Zemax model		
		

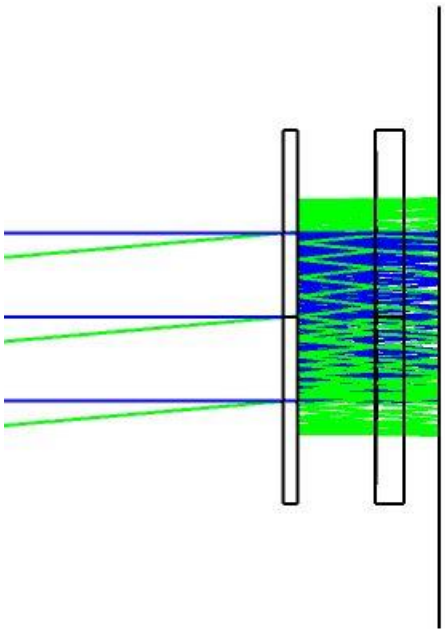


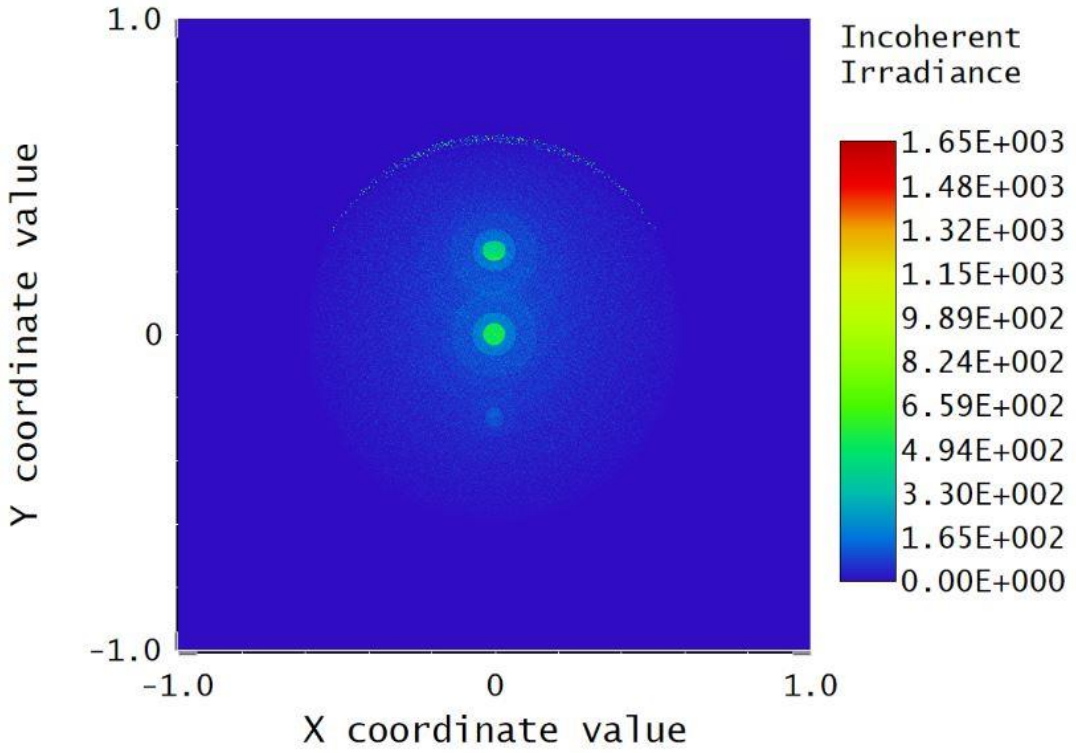
NAME	Telephoto Multiscale lenses
wavelengths	434-656nm visible
EFFL	150mm
F/#	3
MFOV	2°
MTF Zemax model	  

Grin Lens

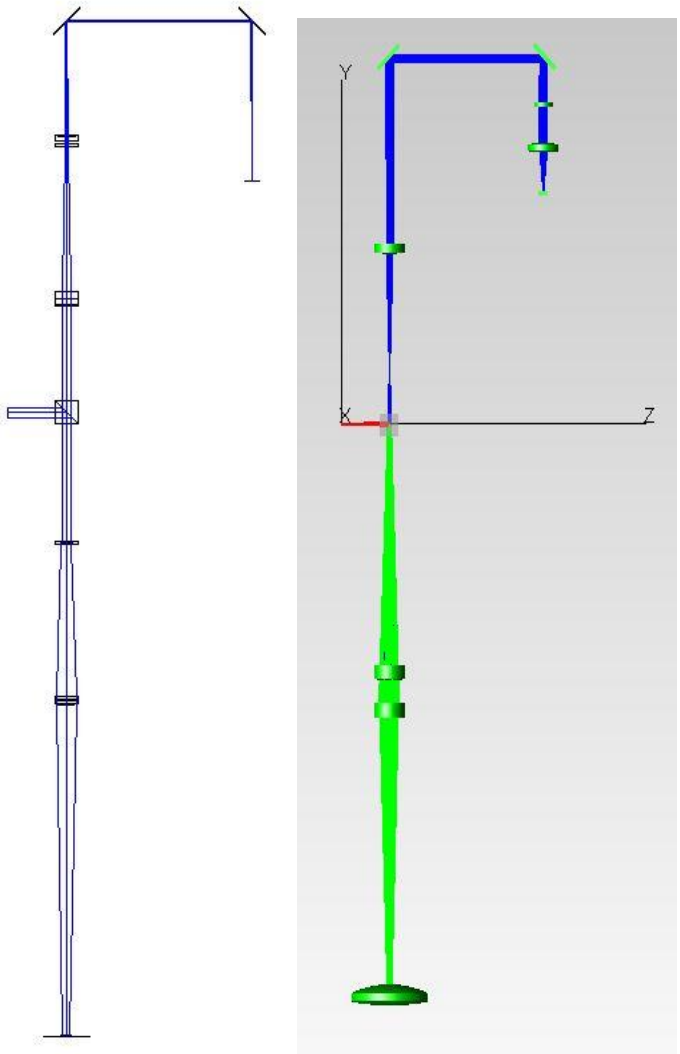
NAME	Grin lens for biological tissue probe
wavelengths	810nm
NA	0.5
FoV	$180\mu m$
Layout&MTF Zemax model	 

Fabry Perot Cavity





LENS CENTERING TOOL



Wavelengths	635nm solid state red laser
Magnification	8X

Zemax and lightTools model