

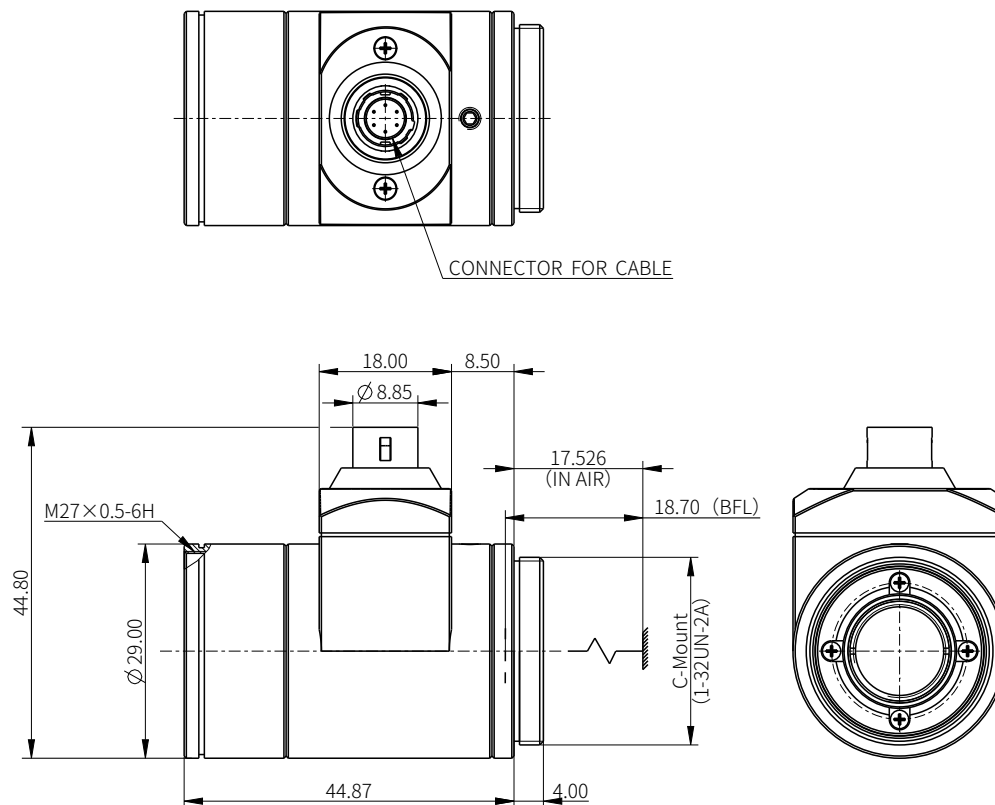
Cobra Series Liquid Lenses

#OPT-COB5080-LQL E.F.L.= 50 mm F8.0

● Specifications

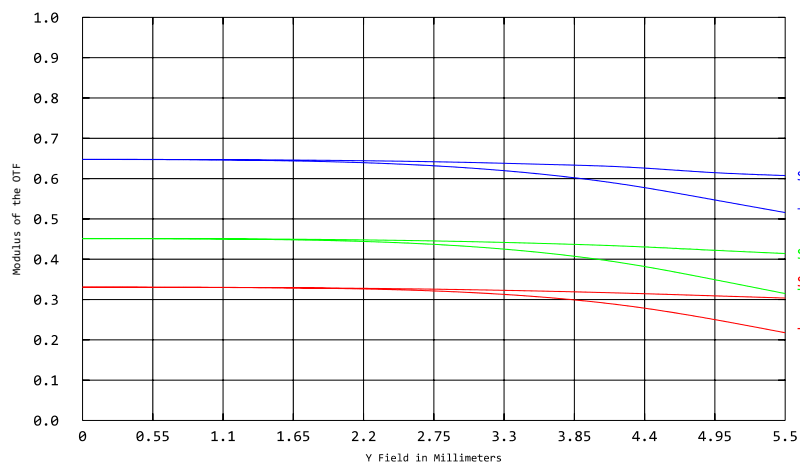
Effective Focal Length (mm)		50
Sensor ø(mm)		11 (2/3")
F NO.		F8.0
FOV Angle	Diagonal (11 mm)	12.55°
	Horizontal (8.8 mm)	10.06°
	Vertical (6.6 mm)	7.55°
Wavelength Range (nm)		435~656
Relative Illumination		>90%
Working Distance (mm)		150~∞
Working Distance without current (mm)		400
Distortion (at WD 400)		<0.2%
Max. Chief Ray Angle		<5°
Flange Focal Distance (mm)		17.526
Back Focal Length (mm)		18.70
Mount		C-Mount
Connector Type		6-pin Hirose connector
Size (mm)		L44.87×W29.00×H44.80
Total Track Length (Liquid Lens included) (mm)		62.396
Focus Tunable Lens Specifications		EL-3-10-VIS-26D-FPC
Focal Power Range at 20°C (dpt)		-13~+13
Wavefront Error at 525 nm (vertical/horizontal) (λRMS)		<0.2 / <0.2
Working Temperature		-20°C~+65°C
Storage Temperature		-50°C~+85°C
Temperature Compensation		No

● Mechanical drawings



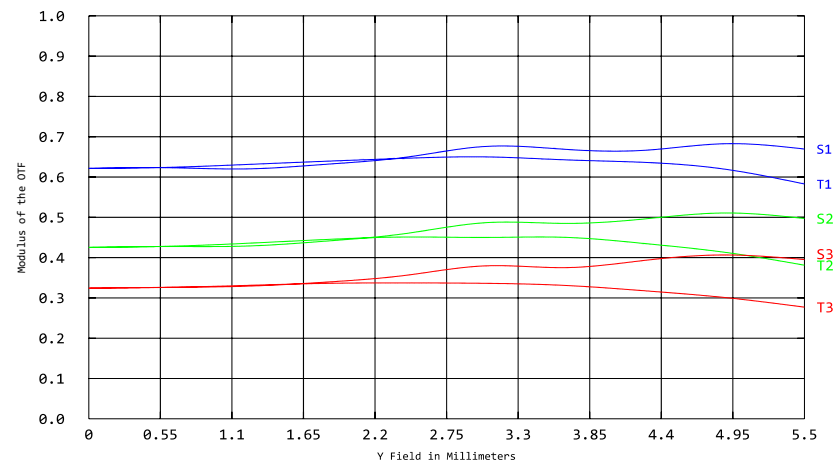
● Modulation Transfer Function(MTF)

W.D. = 200 mm



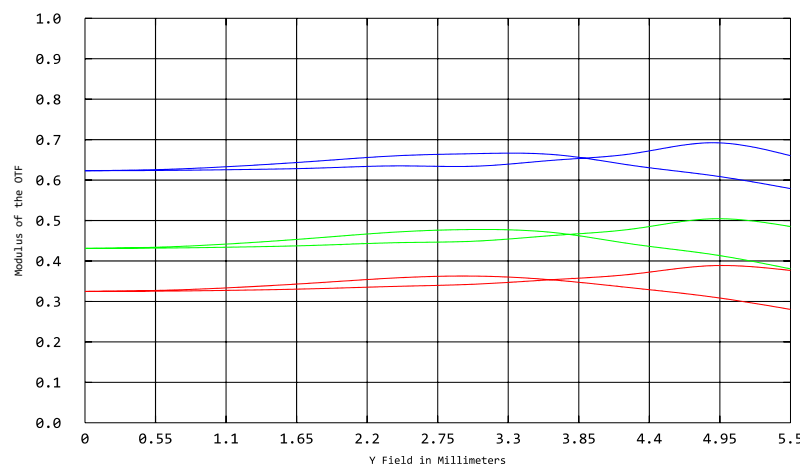
☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 800 mm



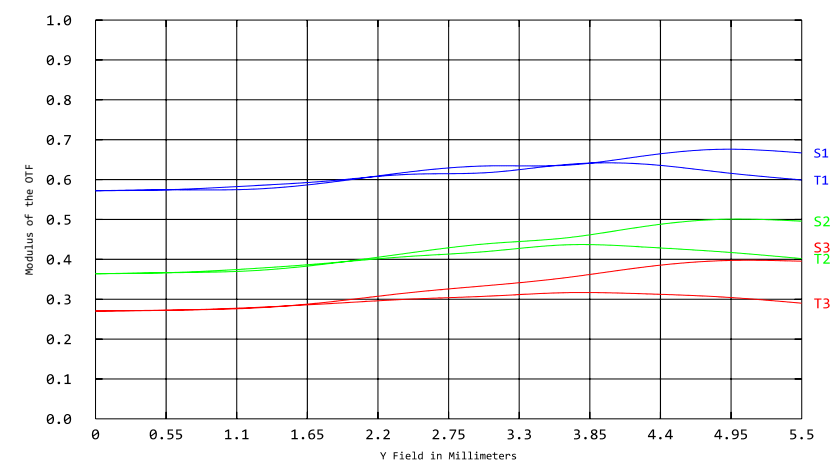
☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 400 mm



☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm

W.D. = 1000 mm



☒ S1 — Sagittal: 50 lp/mm ☒ S2 — Sagittal: 100 lp/mm ☒ S3 — Sagittal: 150 lp/mm
☒ T1 — Tangential: 50 lp/mm ☒ T2 — Tangential: 100 lp/mm ☒ T3 — Tangential: 150 lp/mm