

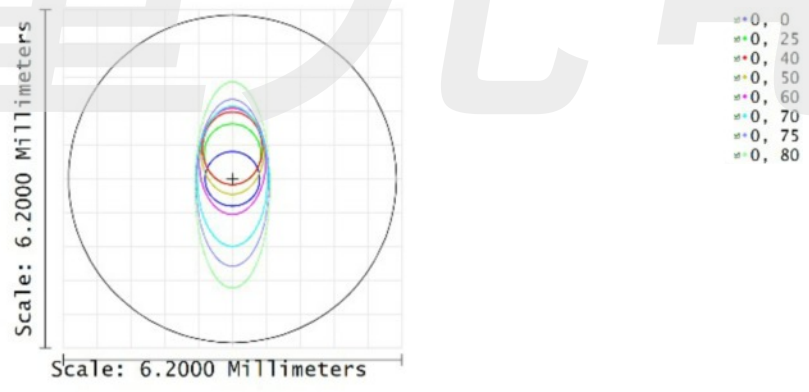
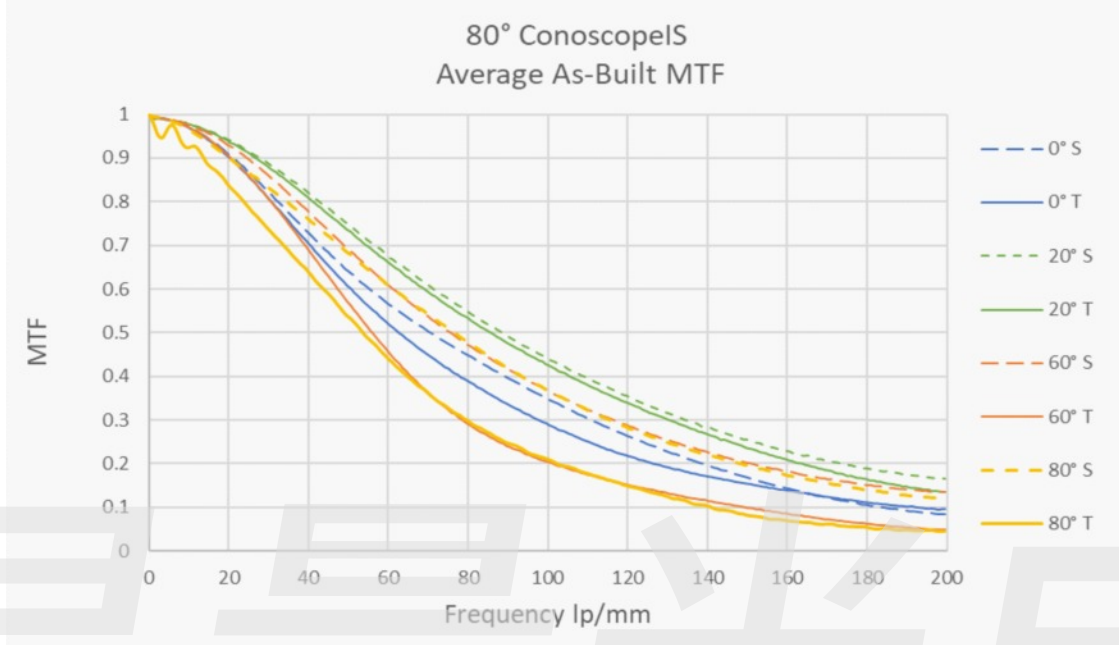


80° Conoscopes

Acceptance Angle	±80°	Measured from axis to edge of field
Entrance Pupil Diameter	1mm	
Object Distance	Infinity	Infinity is appropriate for displays
Front Working Distance	1mm of air	Distance from sample to lens
Image Diameter	8.7mm	
Camera	Sony IMX183	2.4µm pixels
Resolution	0.088°/px	With 2x2 binning
MTF	>20% at 5.4 cy/° (100cy/mm)	Average as built, graph on second page
Distortion	<1.8%	Can be calibrated out
CRA Control	<5°	Maximum chief ray angle
Peak Wavelength	540nm	
Wavelength Range	450-850nm	
Relative Illumination	No vignetting	Falls off approximately as $\cos \theta$
Coating	AR coating for $R < 0.5\%$	For incident angles in the range up to 50°
Mount	Yoke	
Barrel Size	Φ 92 x 350mm long	Length = sample to image plane
Camera Mount	C-Mount	



80° Conoscopels



Aperture Diameter: 6.0048

Footprint Diagram		Eckhardt Optics LLC
80 DEG CONOSCOPIIC SCATTEROMETER	1212	CON080SC_16ELT18H_PROD.ZMX Configuration 1 of 1
2/28/2023		
Surface 1:		
Ray X Min = -0.6883	Ray X Max = 0.6883	
Ray Y Min = -2.0002	Ray Y Max = 1.7746	
Max Radius= 2.0002	Wavelength= 0.5500	

Legend items refer to Field positions

Location of the sampled area as a function of angle.
The blue circle in the center is the on-axis sample.
The red circle above center is the sample for 40° off-axis.
The large, light green ellipse is the sample for 80° off-axis.