

**Theia**<sup>®</sup>  
TECHNOLOGIES

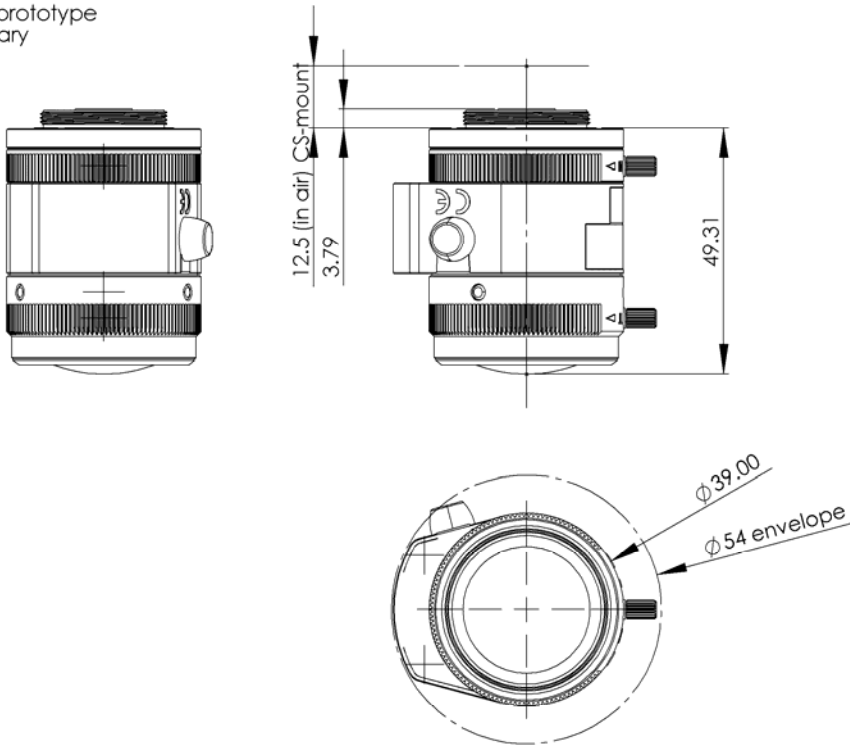
**SL940 / TL936 Family  
Telephoto Varifocal Lens  
9–40mm - Day/Night**

- ◆ **Telephoto Varifocal 9 – 40mm** (SL940), 9-36mm (TL936)
- ◆ IR corrected for **Day/Night** cameras
- ◆ **5 megapixel resolution** for demanding applications Short
- ◆ length, **<50mm** from CS mount
- ◆ Supports **1/3” to 1/2.5”** sensor **Day/Night** cameras

Lenses	<b>SL940A</b> DC-autoiris	<b>SL940M</b> Manual iris
Focal length	9-40mm	
Resolution	Up to 5MPix resolution	
F/#	F/1.5 to close	
IR Correction	Day/Night	
Mount	CS	
Lens length	49.3mm from mount	
Minimum focal distance	2.5m	
Iris cable length	10cm	N/A
Weight	65g	
Operating Temp	-20C to 60C	
Storage Temp	-20C to 70C	

Sensor size	<b>1/3”</b>	<b>1/2.7” HD</b>	<b>1/2.5”</b>
Field of view (H)	30° - 7.1°	37° - 8.6°	36° - 8.5°
Field of view (V)	22° - 5.3°	20° - 4.8°	27° - 6.3°
Field of view (D)	38° - 8.8°	42° - 9.9°	46° - 10.6°

SL940A prototype preliminary

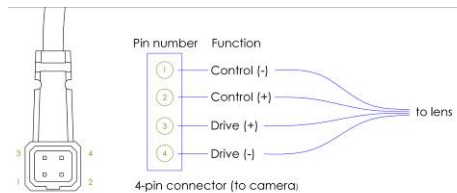


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Optimal glass insertion is 2mm between lens and sensor.  
Back focus is 12.5mm in air.

### Autoiris lens

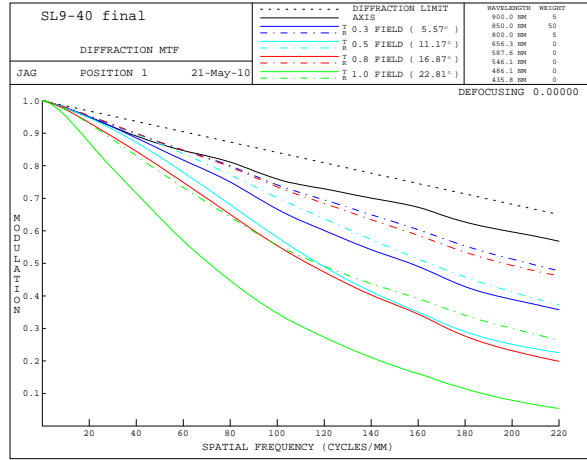
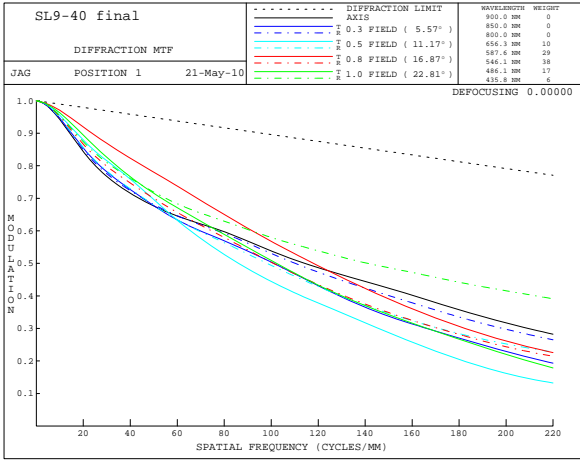
The iris operation is controlled electronically by the camera with DC autoiris control. The autoiris cable should be connected to the camera's iris cable receptacle. Refer to your camera manufacturer's operators manual to set the camera's iris control to "DC autoiris".



Drive Voltage range: 3V (+1/-0.5 V)  
Max current consumption: 22mA (max V/Drive  $\Omega$ )  
Drive coil resistance: 190 $\Omega$   
Damper coil resistance: 855 $\Omega$

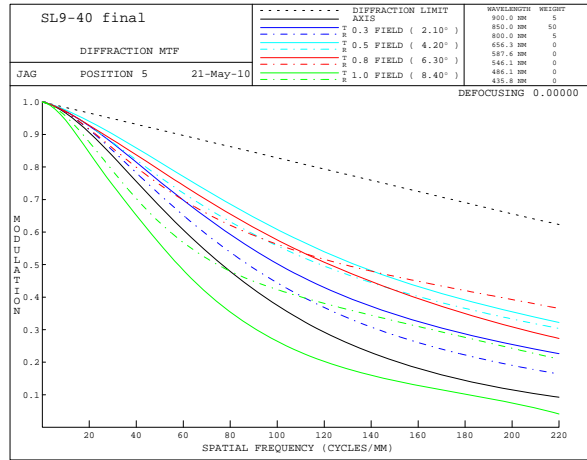
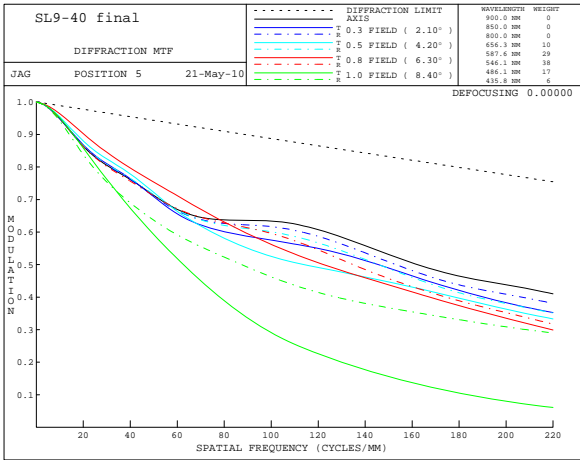
## Visible MTF

## IR 850nm MTF



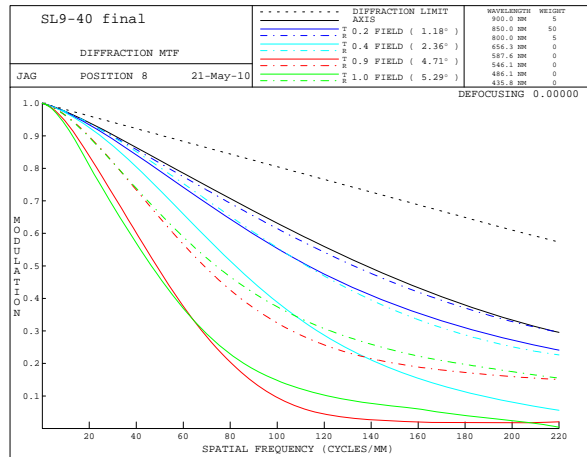
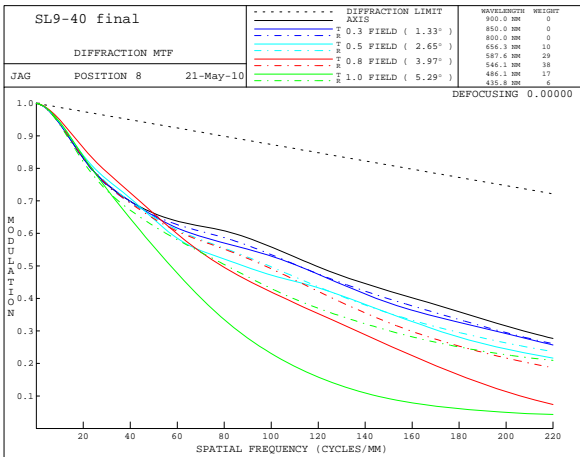
Wide Position

Wide Position



Mid Position

Mid Position

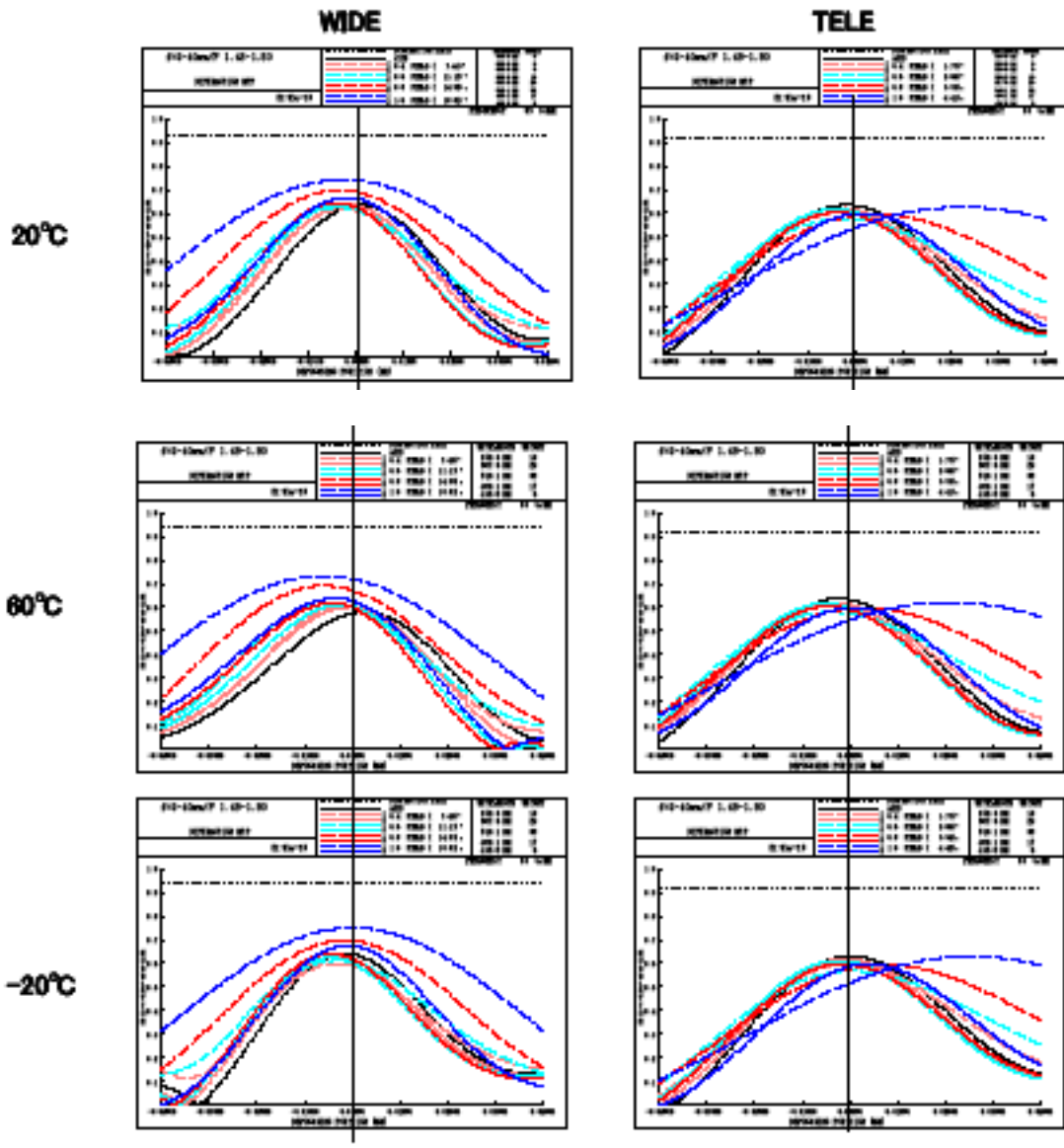


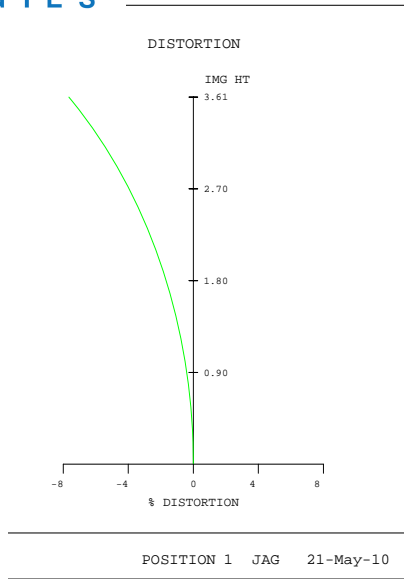
Narrow Position

Narrow Position

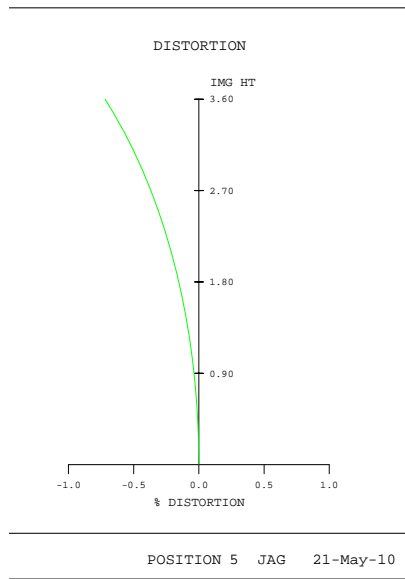
## Temperature Performance

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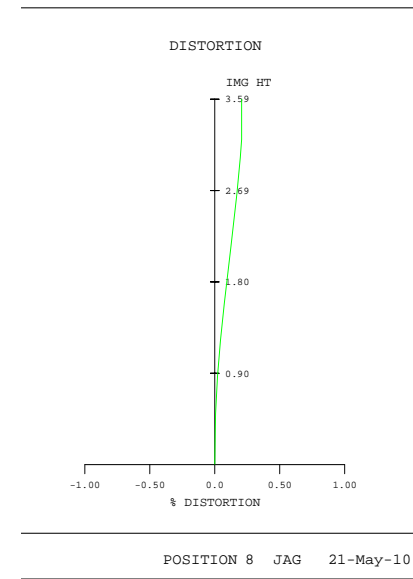




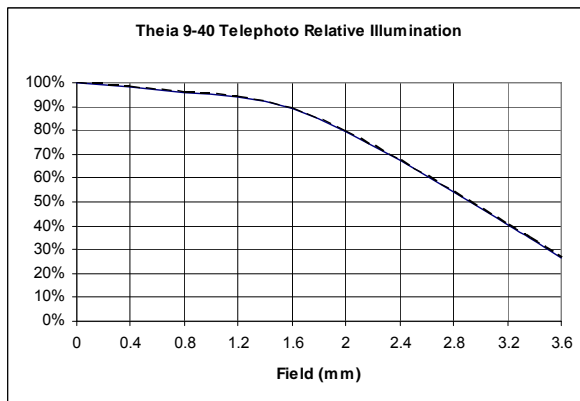
Wide Position



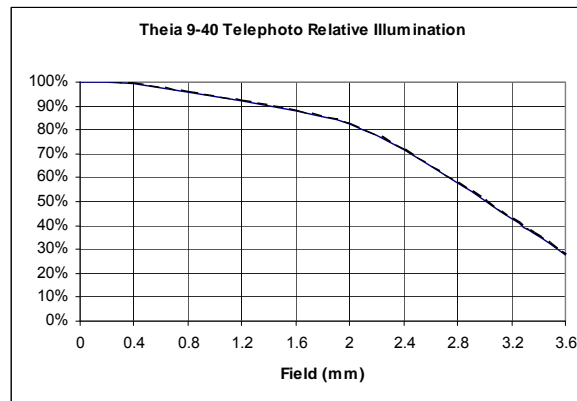
Mid Position



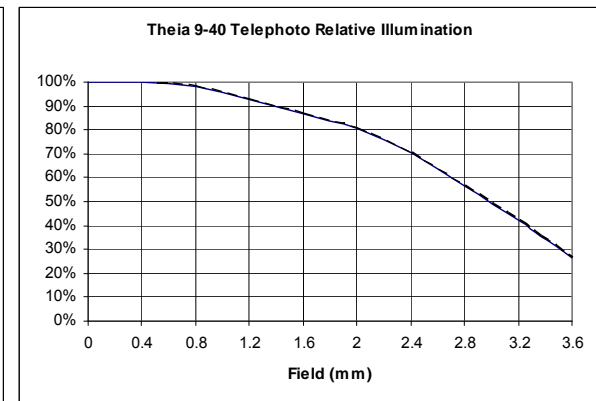
Narrow Position



Wide Position



Mid Position



Narrow Position