

**Theia**<sup>®</sup>  
TECHNOLOGIES

**SL183 / ML183**  
**Ultra-wide Varifocal Lens**  
**1.8–3mm - Day/Night - No Distortion**

- ◆ **Ultra wide 115° Varifocal 1.8 – 3mm** IR corrected for **Day/Night** cameras
- ◆ Patented Linear Optical Technology<sup>®</sup> enables **no barrel distortion**
- ◆ Supports **1/3” to 1/2.5”** sensor **Day/Night** cameras
- ◆ Up to **5 megapixel resolution** for demanding applications

**SL183 / ML183 Performance Data**

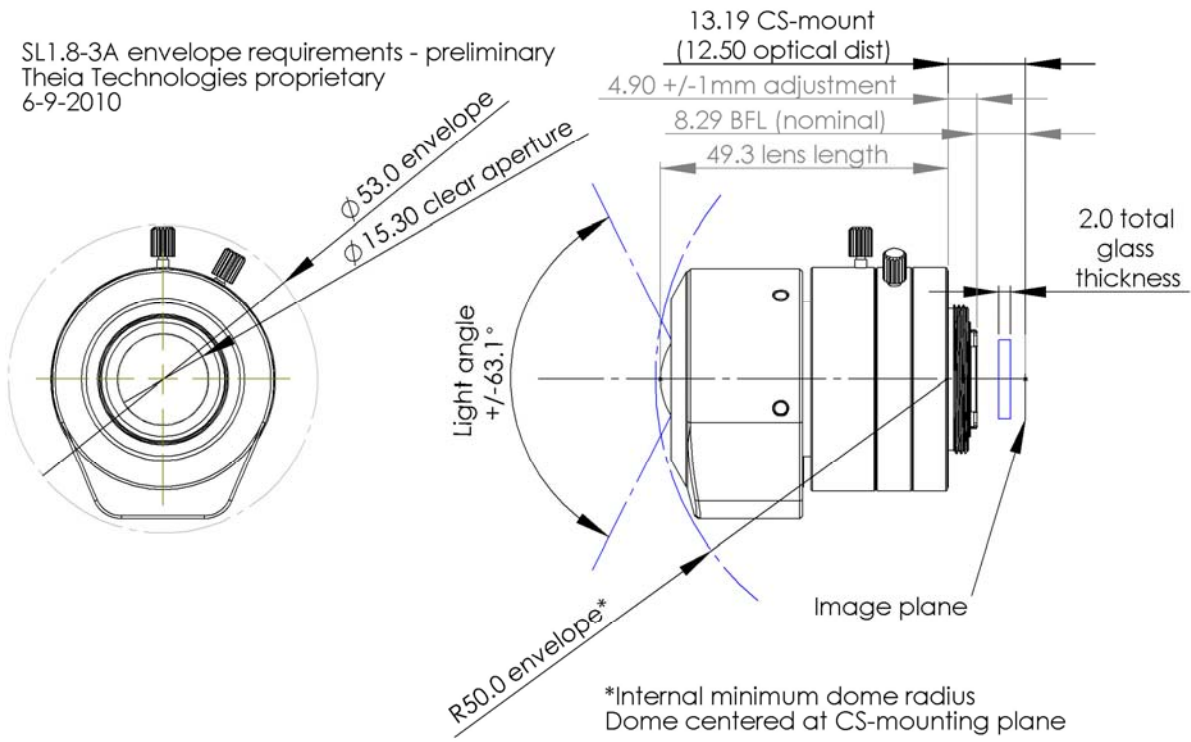
Lenses	<b>SL183A</b> DC-autoiris	<b>SL183M</b> Manual iris
Focal length	1.8-3.0mm	
Linear Optical Technology <sup>®</sup>	Yes	
Distortion	<1%	
Resolution	Up to 5MPix resolution	
F/#	F/1.8 to close	
Focus Range	0.5m to ∞	
Back Focus Length	8.3mm nominal, 7.5mm minimum	
IR Correction	Day/Night	
EasyZoom <sup>™</sup>	Yes	
Mount	CS	
Weight	63g	
Dimensions	50 x54.2mm (see image below)	
OperatingTemp	-20C – 60C	
Storage Temp.	-20C – 70C	

**Field of View**

Sensor size		1/4” sensor	1/3” sensor	1/2.7” HD format	1/2.5” sensor	1/2” sensor
SL183A SL183M	(H)	89° - 62°	105° - 77°	116° - 89°	115° - 88°	120° - 94°
	(V)	73° - 49°	90° - 62°	84° - 57°	99° - 71°	105° - 77°
	(D)	102° - 74°	117° - 90°	123° - 96°	126° - 100°	*

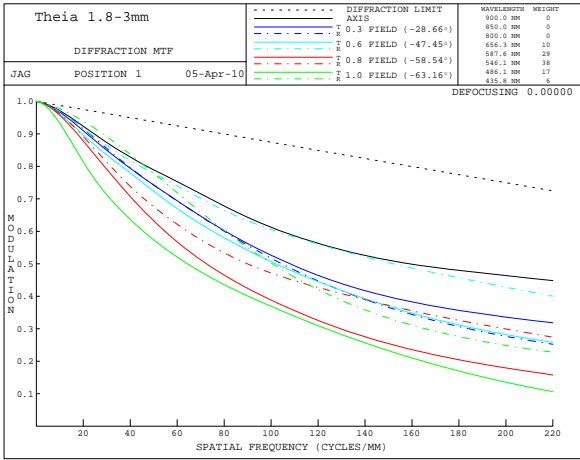
\*When using the lens with a sensor of greater than 1/2.5”, dark corners will be seen in the full image.

SL1.8-3A envelope requirements - preliminary  
Theia Technologies proprietary  
6-9-2010

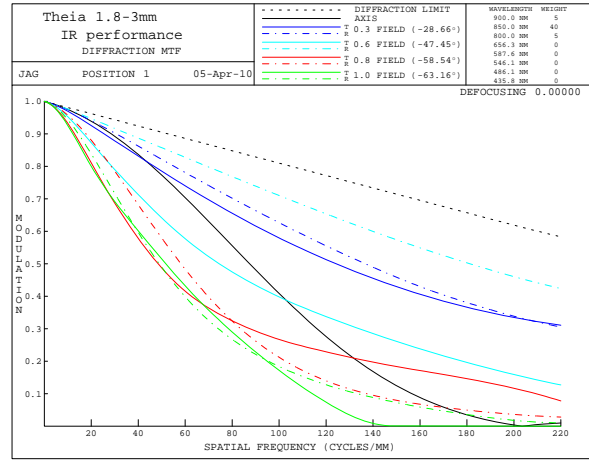


## Visible MTF

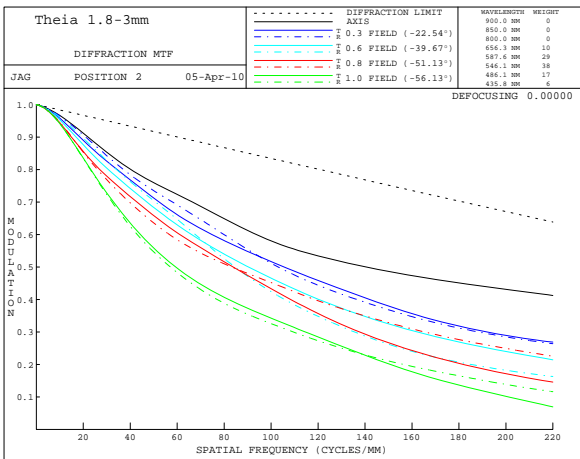
## IR 850nm MTF



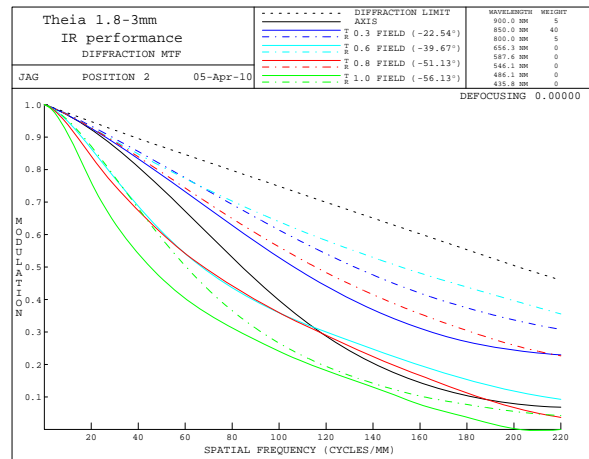
Wide Position



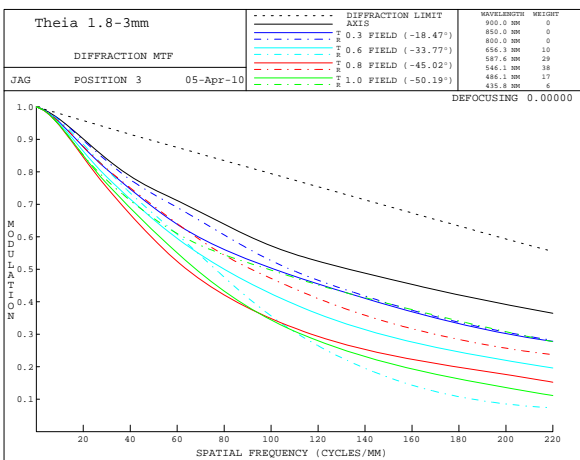
Wide Position



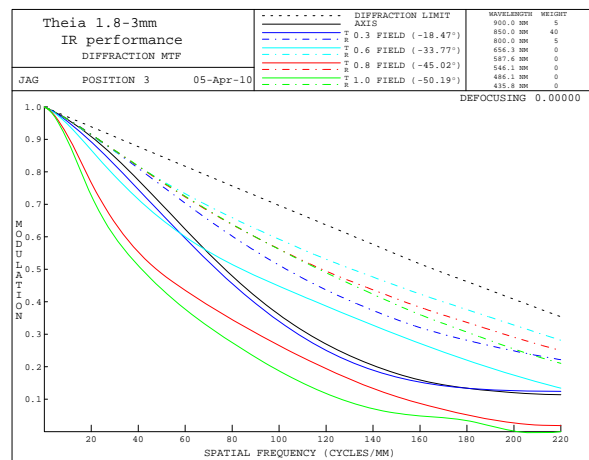
Mid Position



Mid Position

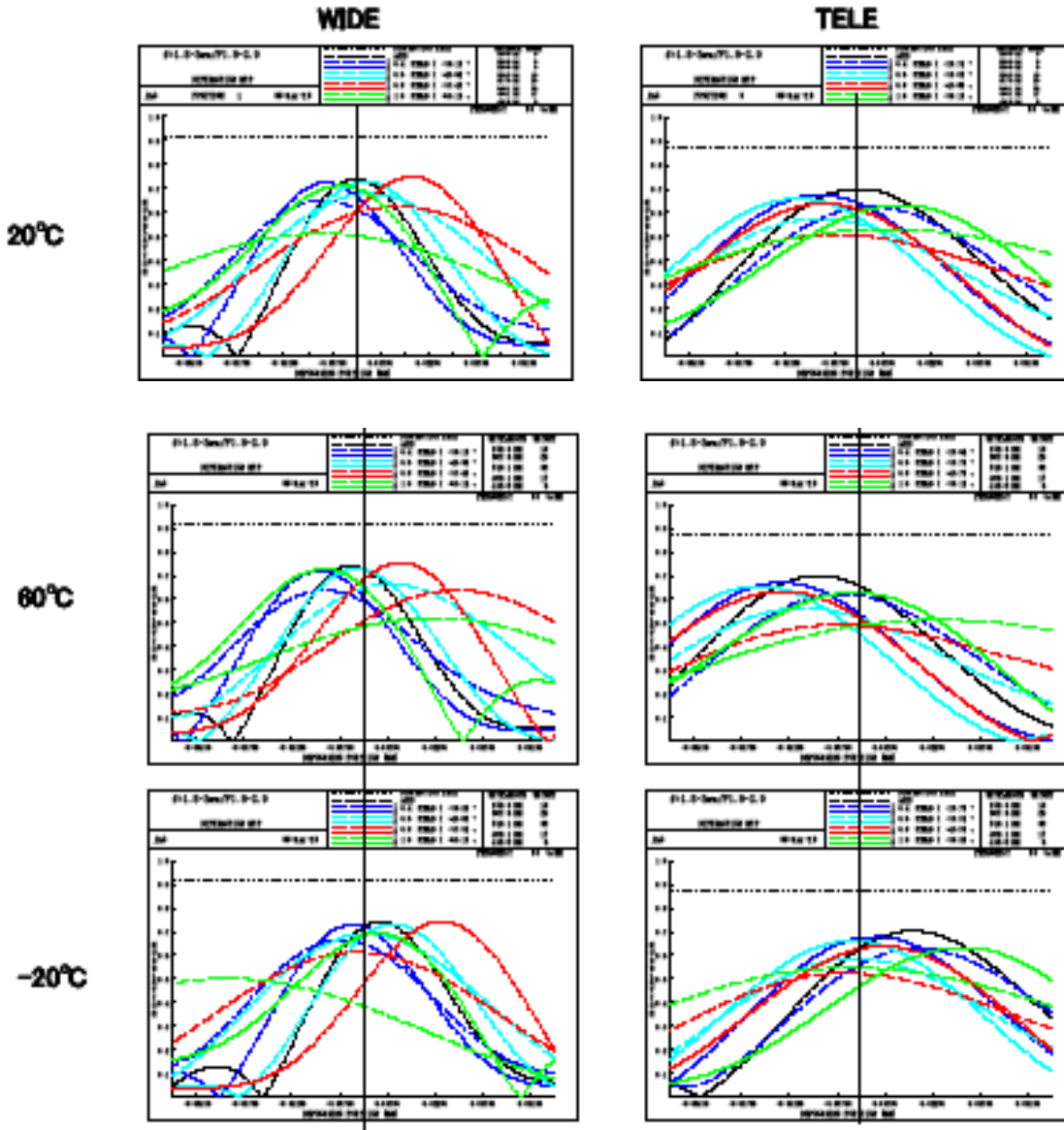


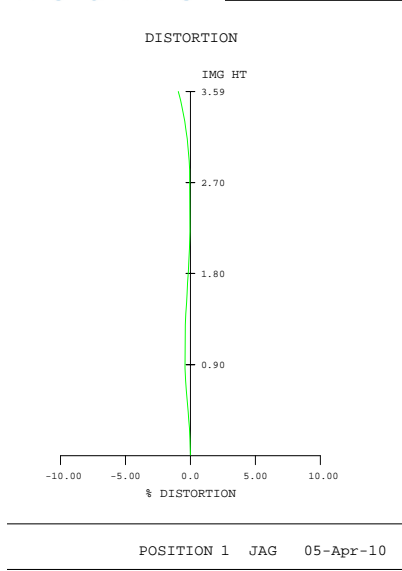
Narrow Position



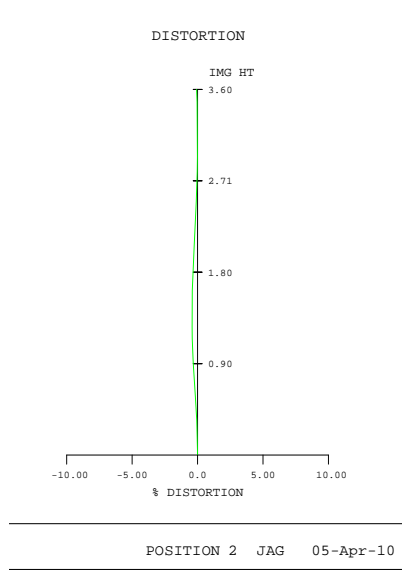
Narrow Position

## Temperature Performance

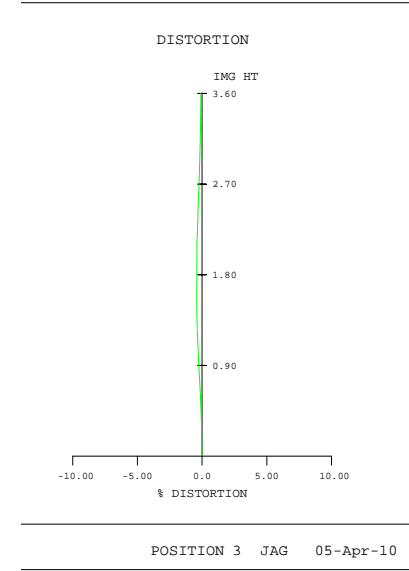




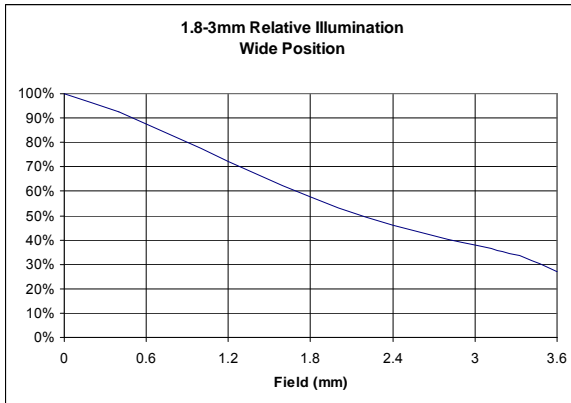
Wide Position



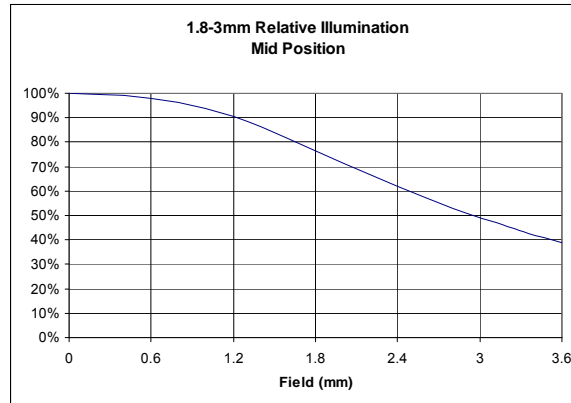
Mid Position



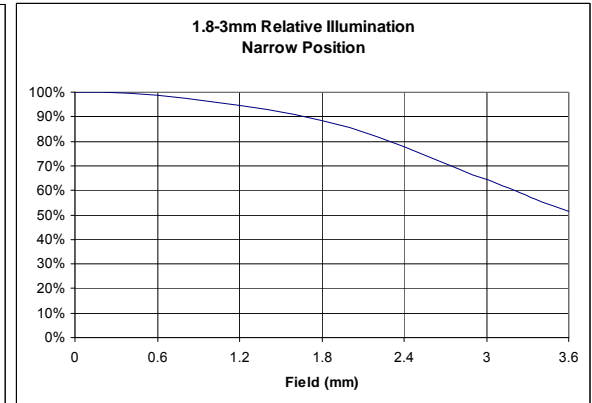
Narrow Position



Wide Position



Mid Position



Narrow Position