

Lens Information

Part Number:	MVTC23024
Serial Number:	491216
Test Date:	1/22/2014
Tested By:	MHC
N° Horizontal Pixels:	2108
N° Vertical Pixels:	2108

Working Distance

Distance between the object and the first mechanical surface of the lens.	
W.D., Nominal (mm):	103.2
W.D., As Tested (mm):	103.1
W.D. Error (%):	0.10%

Magnification

Measured on-axis from a square target of a known size in both the tangential and sagittal directions and averaged.	
Mag., Nominal:	0.243
Mag., As Tested:	0.244
Mag. Error (%):	0.41%

Telecentricity

Measured by moving the target between the borders of the field depth test range and recording the change in field heights. The chief ray is then calculated from the ratio of the field height change to the total target displacement.

Maximum (deg):	-0.128
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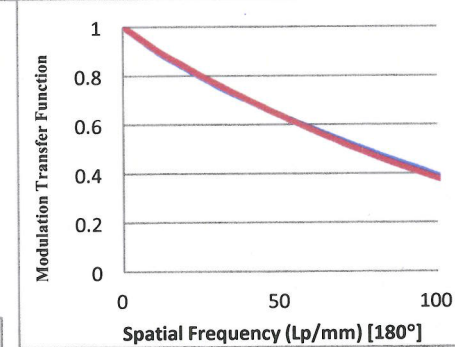
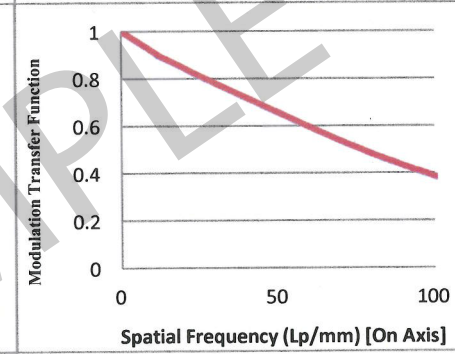
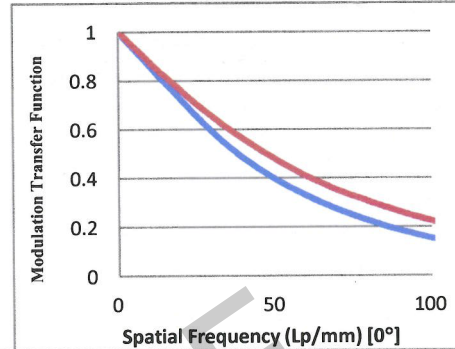
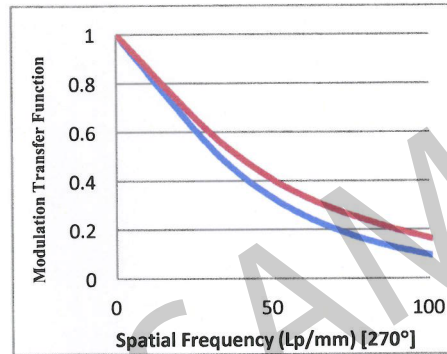
Radial Distortion

Characterized by measuring the field heights from the center of the field to the edge and calculating the deviation of the measure values from the on-axis magnification.

Avg Radial Distortion (%):	-0.02%
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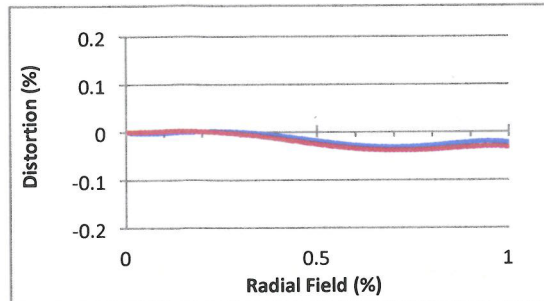
Test Conditions

Target: Chrome-on-glass .25mm dots
Illumination: 450-650nm white LED telecentric back light source
Camera: Grasshoper3 USB3.0 mono, 1" sensor cropped to 2/3" format, 3.69 micron pixel size



Modulation Transfer Function

The loss of contrast determined from imaging an object, expressed in spatial frequency. The higher the ratio, the higher the contrast. MTF measured on-axis and at four quadrants in the field in both tangential and sagittal directions.



Note: Tangential lines are blue. Sagittal lines are red.