**Lens Information**

- **Part Number:** MVTC23005
- **Serial Number:** 493163
- **Test Date:** 4/7/2014
- **Tested By:** MHC
- **N° Horizontal Pixels:** 2108
- **N° Vertical Pixels:** 2108

**Test Conditions**

- **Target:** Chrome-on-glass, 25mm dots
- **Illumination:** 450-650nm white LED telecentric back light source
- **Camera:** Grasshopper3 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.

**Working Distance**

The distance between the object and the first mechanical surface of the lens.

- **W.D., Nominal (mm):** 529.662
- **W.D., As Tested (mm):** 529.7
- **W.D. Error (%):** 0.01%

**Magnification**

Measured on-axis from a square target of a known size in both the tangential and sagittal directions and averaged.

- **Mag., Nominal:** 0.051
- **Mag., As Tested:** 0.0498
- **Mag. Error (%):** 2.35%

**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):** -0.037

**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%