IMAGE QUALITY SERVICES
Image Quality Assurance and Optical Performance Validation for All Your Testing Needs

Optikos® metrology services are provided through our optical testing lab and offer the most comprehensive modulation transfer function (MTF) lens testing and imaging sensor testing available in one location. All services are performed by our expert optical engineers and technicians. Our extensive lab is available for contract metrology work for testing both components and complete imaging systems.

COMPREHENSIVE TESTING

Testing is offered for lenses, camera systems, optical and electro-optical components and systems; and a range of metrology capabilities are available for non-imaging measurements and optical element characteristics.

FULL SERVICE LAB

Testing is available for any application. From in-line manufacturing and robotics to medical devices and consumer products; for small startups to Fortune 500 companies—if you have doubts about your image quality, we’re fully equipped to help. You’ll receive a complete report of results and recommendations that will help you make an informed assessment of your situation.

SEAMLESS PROCESS

It’s easy to get started and expedited services are available if you need your test results right away:

**Step 1:** Tell us about your optical testing requirements. Give us a call or send an email and an optical engineer will review your situation and recommend next steps.

-- Call +1 617.354.7557
-- Email sales@optikos.com
-- Complete our online questionnaire: [http://www.optikos.com/lens-testing-questionnaire/](http://www.optikos.com/lens-testing-questionnaire/)

**Step 2:** You’ll receive a quotation for your project within one to two days.

**Step 3:** Send your material to:
Optikos Corporation
107 Audubon Road, Bldg. 3
Wakefield, MA  USA
Attn: Image Quality Services

**Step 4:** Typically within two weeks or less, we’ll email your test results and return your material.
<table>
<thead>
<tr>
<th>LENS TESTING</th>
<th>CAMERA TESTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Visible Systems</td>
<td>● Modulation Transfer Function (MTF)</td>
</tr>
<tr>
<td>● Infrared Spectrums</td>
<td>● Contrast</td>
</tr>
<tr>
<td>● Image Quality MTF</td>
<td>● Linearity</td>
</tr>
<tr>
<td>● UV-VIS Transmission Measurements</td>
<td>● Signal Transfer Function (STTF)</td>
</tr>
<tr>
<td>● IR Transmission Measurements</td>
<td>● Minimum Resolvable Contrast (MRC)</td>
</tr>
<tr>
<td>● Astigmatism</td>
<td>● Noise Power Spectrum (NPS)</td>
</tr>
<tr>
<td>● Field Curvature and Tilt</td>
<td>● Root Mean Square Noise (RMS)</td>
</tr>
<tr>
<td>● Distortion</td>
<td>● Noise Equivalent Luminance (NEL)</td>
</tr>
<tr>
<td>● Relative Illumination</td>
<td>● Minimum Detectable Contrast (MDC)</td>
</tr>
<tr>
<td>● Subjective Quality Factor (SQF)</td>
<td>● Minimum Resolvable Temperature Difference (MRTD)</td>
</tr>
<tr>
<td>● Strehl Ratio</td>
<td>● Minimum Detectable Temperature Difference (MDTD)</td>
</tr>
<tr>
<td>● Radial Energy Distribution</td>
<td>● Signal Transfer Function (STTF) Equivalent Temperature Difference (NEDT)</td>
</tr>
<tr>
<td>● Field of View</td>
<td></td>
</tr>
<tr>
<td>● Relative Spectral Transmission</td>
<td></td>
</tr>
<tr>
<td>● Total Transmission</td>
<td></td>
</tr>
<tr>
<td>● Veiling Glare and Stray Light</td>
<td></td>
</tr>
<tr>
<td>● Effective Focal Length</td>
<td></td>
</tr>
<tr>
<td>● Flange Focal Length</td>
<td></td>
</tr>
<tr>
<td>● Back Focal Length</td>
<td></td>
</tr>
<tr>
<td>● F-Number</td>
<td></td>
</tr>
<tr>
<td>● Entrance and Exit Pupil Diameters</td>
<td></td>
</tr>
</tbody>
</table>

**OTHER METROLOGY CAPABILITIES**

*Non-Imaging Measurements*
- LED Power Output
- LED Spectral Characteristics
- Radiometric Parameters
- Photometric Parameters
- Prism Angles

*Optical Element Characteristics*
- Radius of Curvature
- Center Thickness
- Diameter
- Index of Refraction
- Abbe Number
- Surface Irregularity
- Surface Quality
- Stressed Birefringence
- Phase-shifting Interferometric Measurements
- Dioptric Power of Spectacle Lenses

**COMPONENTS/SYSTEMS MEASURED**

*Typical Optical Systems:*
- CCD, CMOS, and Photographic Lenses
- NIR and Night Vision Optics
- Thermal IR Lenses
- Miniature Optics
- Automotive Lenses
- Intraocular Lenses (IOLs)
- Cellphone Camera Lenses
- Webcam Lenses
- Microscope Objective Lenses
- Custom Lenses
- Prototype (Proof-of Concept) Lenses

*Typical Electro-Optical Systems:*
- CCDs and CMOS Sensors
- Microbolometers
- FPAs
- Starring Arrays
- Mid and Long Wave Cameras
- Thermal Imagers
- Displays
- Image Intensifiers and Image Intensifying Systems

*Typical Non-Imaging System:*
- LEDs
- OLEDs
- Optical Bandpass Filters
- Computer Privacy and Glare Reducing Screens
- Railroad Signals
- Pool Illumination Optics
Get Started with Optikos

Optikos offers engineering design and manufacturing, and a full-line of metrology products and services for testing optical, imager and camera systems that are appropriate for any industry—or we will design a custom product for your specific needs. Visit our website at optikos.com or contact us to help you choose the right optically-based solution for your application.

Optikos Corporation
107 Audubon Road, Bldg. 3
Wakefield, MA 01880 USA
Phone: +1 617.354.7557
Email: sales@optikos.com
Web: optikos.com

DATE OF ISSUE: 02.01.2016