

**OPTEST® 7 SOFTWARE**

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**Industry Standard Software for  
OpTest® and LensCheck™ Systems  
Image Quality Metrology**



# OpTest® 7 Software Optimized for Performance

## Powers OpTest® Metrology Benches and LensCheck™ Instruments

At its core, OpTest 7 is a software application that integrates with all OpTest metrology benches and LensCheck instruments to control electronic hardware assemblies (including all motorized motion elements); to acquire and analyze video and scanning detector signals; and to present the measurement results to the user in a graphical manner. OpTest 7 runs under Windows® 7 and includes a licensed version of Microsoft Excel with each installation. All measurement data may be exported directly to formatted Excel workbooks for easy inclusion in customer reports or internal documents.

## Features of OpTest® 7 Software Include:

- A newly-designed, *intuitive graphical user interface*
- *Multiple user modes* optimized for a diverse user base:
  - Production
  - Laboratory
  - Engineering
- *Easy-to-configure* test routines
- Routines set-up by engineers and available to Laboratory and Production users
- *Faster measurement* time
- *Automatic reticle sizing* for more accurate measurements
- *Advanced report generation directly to Microsoft® Excel*
- The *most comprehensive* set of lens measurements available, including:

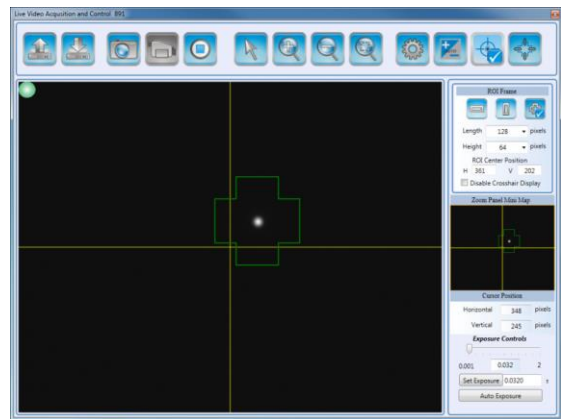


Figure 1: OpTest 7 Live Video Window



- MTF
- Through-Focus MTF
- Depth of Focus
- Blur Spot Size
- Astigmatism
- Effective Focal Length
- Distortion
- Field Curvature
- Chief Ray Angle (Principal Ray Angle)
- Encircled and Ensquared Energy
- Axial Color
- Lateral Color
- Line of Sight (Boresight)\*
- Transmission\*
- Stray Light\*

\*Additional equipment is required.

## Sample OpTest™ 7 Reports

The following OpTest™ 7 reports are generated in Microsoft Excel® directly from the OpTest™ 7 software. Both Microsoft Office® and the Report Generation package are included standard in each system.

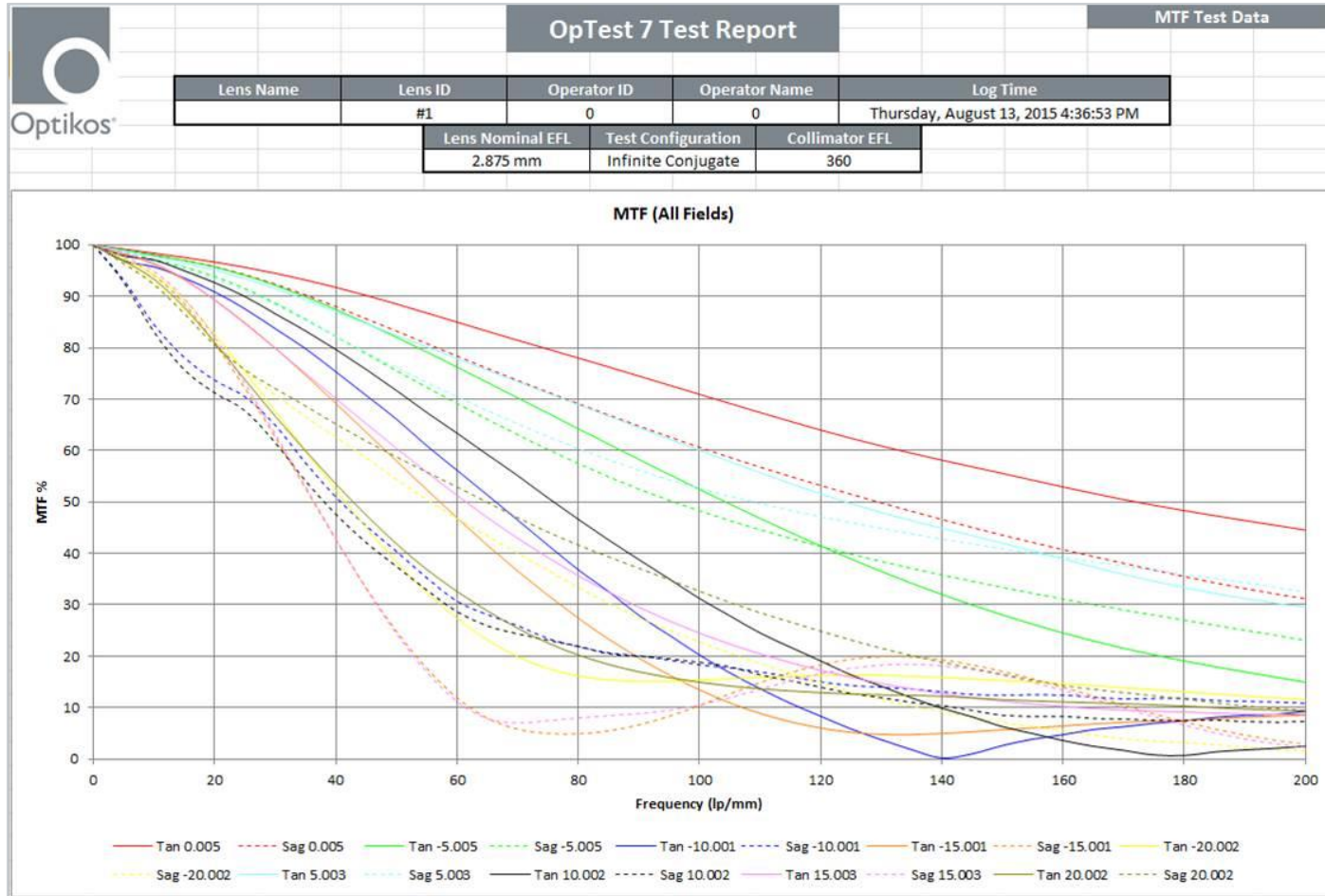
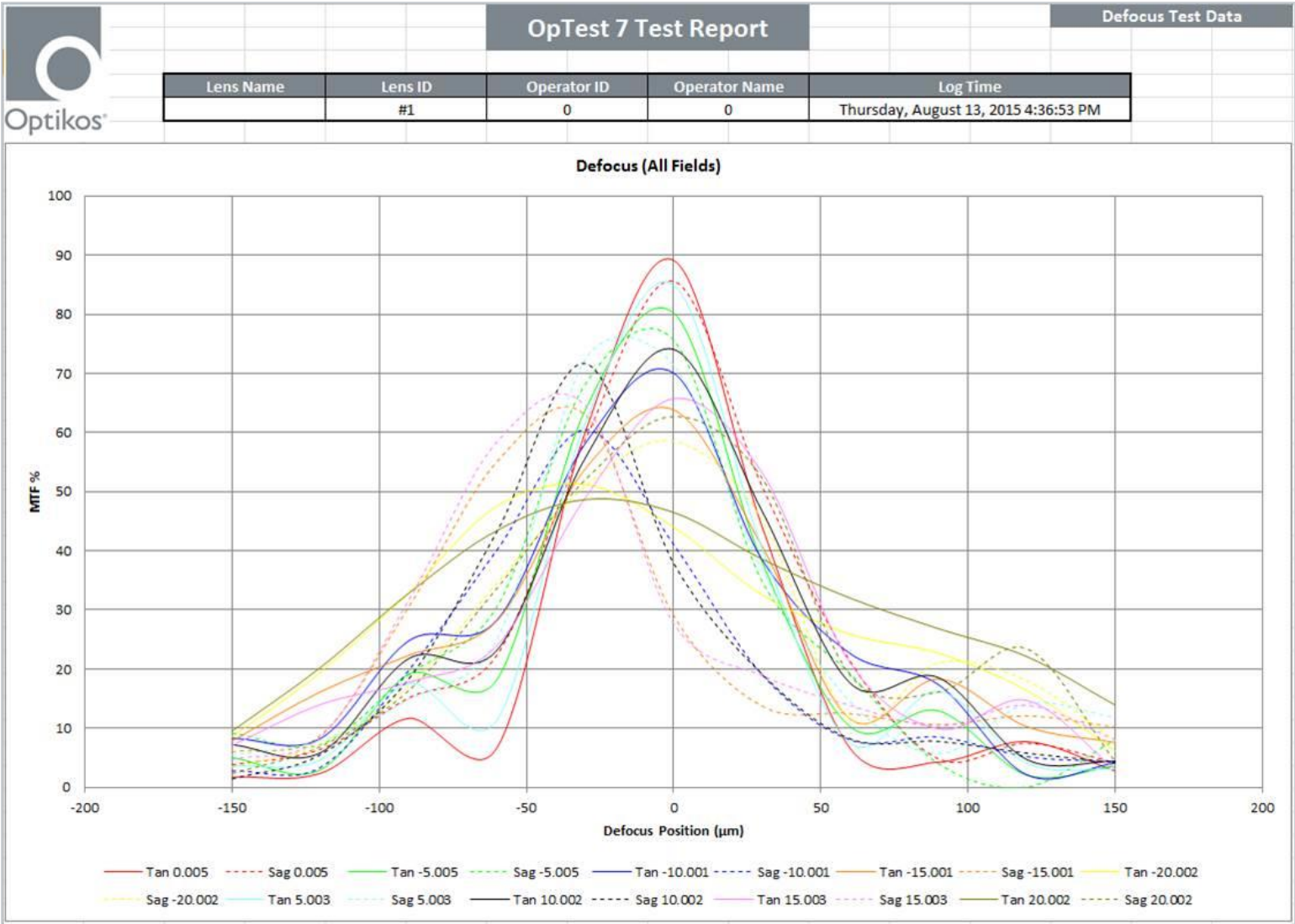


Figure 2: MTF Test Data



Defocus Test Data

Figure 3:



# OpTest 7 Test Report

Field Curvature Test Data

Lens Name	Lens ID	Operator ID	Operator Name	Log Time
	#1	0	0	Thursday, August 13, 2015 4:36:53 PM

	Horizontal	Vertical	Average	
Lens Tilt	0.0770063	0.0114718		degrees
Average Focus	-9.878679	-19.50962	-14.69415	μm

Azimuth (°)	H-Defocus (μm)	V-Defocus (μm)	Avg-Defocus (μm)	Astigmatism (μm)
-20.00177	-32.471126	-3.3429745	-17.90705042	-29.1281519
-15.00146	-5.370513	-40.160152	-22.76533262	34.7896392
-10.00149	-8.5148323	-29.181678	-18.84825511	20.66684563
-5.004919	-8.6027551	-15.320778	-11.96176664	6.718023161
0.0046142	-5.6898422	-3.9452442	-4.817543202	-1.74459809
5.0028315	-6.0482938	-11.967679	-9.007986142	5.919384764
10.001818	-3.5642376	-30.776656	-17.17044689	27.21241863
15.003001	2.2218535	-41.705002	-19.74157427	43.92685555
20.002427	-20.866991	0.81376535	-10.02661278	-21.6807563

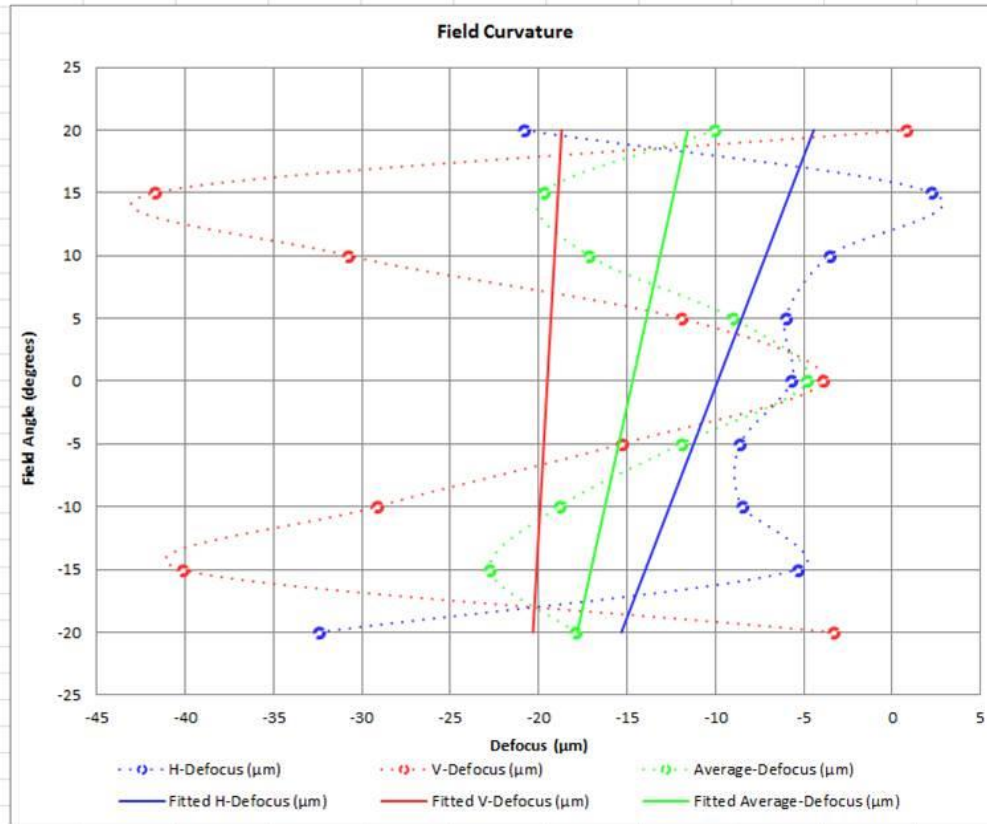


Figure 4: Field Curvature Test Data



# OpTest 7 Test Report

EFL/Distortion Test Data

Lens Name	Lens ID	Operator ID	Operator Name	Log Time
	#1	0	0	Thursday, August 13, 2015 4:36:53 PM
Fitted EFL	Polynomial Fitting Formula			
11.735551 mm	$11.73555067568X + 5.74432362411785E-02X^2 + 1.76742259970496X^3$			

Field Angle (°)	Distortion (%)
-20.00177	1.817327862
-15.00146	0.95034069
-10.00149	0.382066982
-5.004919	0.072638168
0.0046142	3.95174E-05
5.0028315	0.158256063
10.001818	0.554744821
15.003001	1.212925698
20.002427	2.173824181

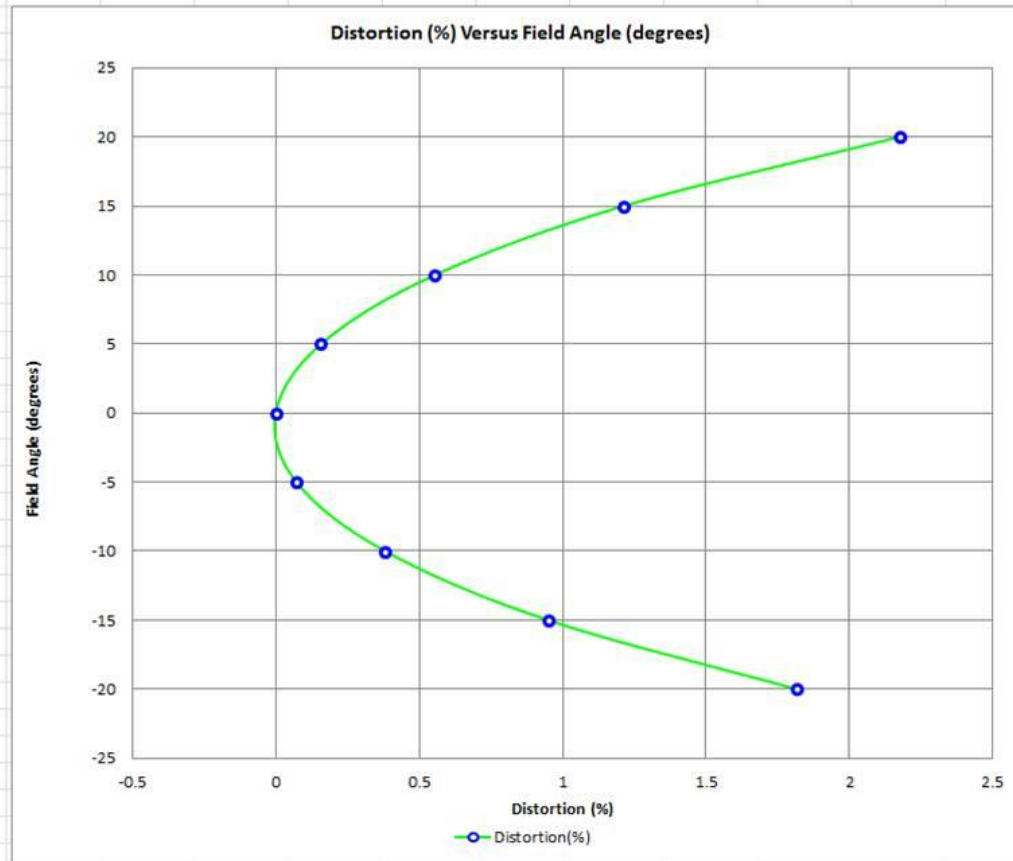


Figure 5: Field Curvature Test Data

## Get Started with Optikos

Optikos offers metrology products and services for measuring lenses and camera systems, as well as engineering design and manufacturing for optically-based product development.

Our full-line of standard products for testing optical, imager and camera systems are appropriate for any industry and we will design a custom product for your specific application. Visit our website at [www.optikos.com](http://www.optikos.com) and contact us or your international sales representative to help you choose the right solution for your testing needs.

**Optikos Corporation**  
107 Audubon Road, Bldg. 3  
Wakefield, MA 01880 USA

**Phone:** +1 617-354-7557  
**Email:** [sales@optikos.com](mailto:sales@optikos.com)  
**Web:** [www.optikos.com](http://www.optikos.com)