

## Enhanced Simulated Wear Test (ESWT)\*

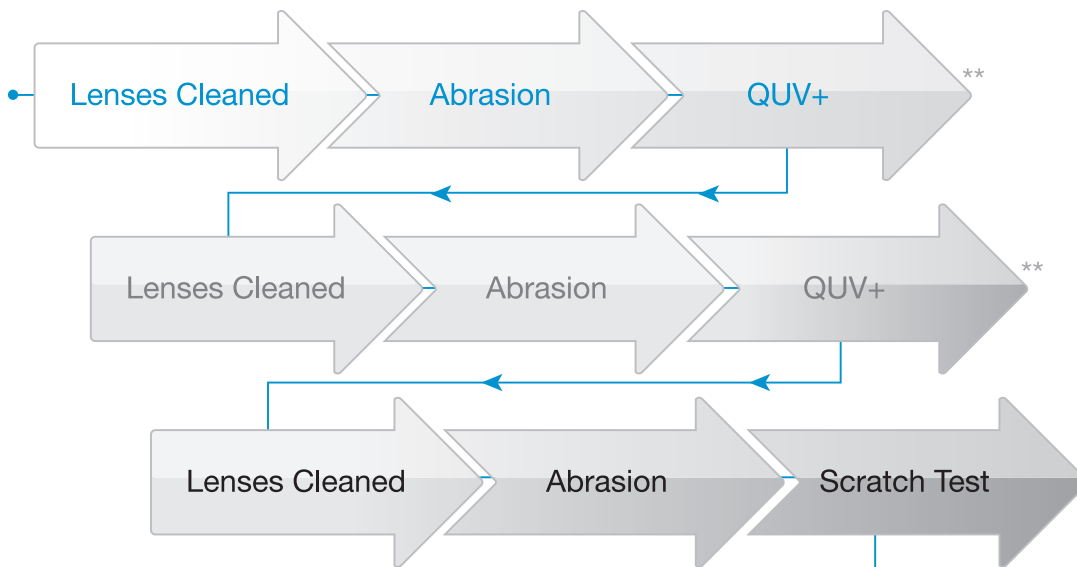
### All New Performance Evaluation Testing AR Coated Product

Currently, the Ophthalmic Industry relies heavily on the Simulated Wear Test (SWT), but this test does not take into account recent advances in lens coating technology and it does not incorporate real-life conditions. NSL Analytical's Enhanced Simulated Wear Test (ESWT) is the better option for ophthalmic lens testing because, unlike its predecessor, the ESWT uses scientific, quantifiable and repeatable procedures to evaluate lens coatings. The test simulates real-life conditions such as scratching, the environment (i.e. UV, heat and humidity), perspiration and body oils, and cleaning.

### Unique ESWT\* Advantages:

- Produces more recurring and reliable results
- Captures more real-life factors
- Reveals performance in individual lenses and lens sets
- ISO International Industry Standards
- Determines variability in production location
- Recognizes changes in performance
- Specifies where the performance of the lens will have the biggest change

\*This testing is accepted by Lens Processors, Lens Technical Advisors and has the support of the Vision Council technical committee.



\*\* Measurements & ratings can be done after each step to provide an indication of lens condition over time and an early warning of deteriorating condition.

**Measurements & Ratings\*\***  
Overall Durability Rating Calculated from Weighted Measures of Crazeing, Delamination, Adhesion, Transmittance, Loss Haze, Cleanability

Learn how NSL can work with you to verify your raw materials and help solve your product performance challenges.

Visit us at [NSLanalytical.com/materials-testing-quote](https://www.NSLanalytical.com/materials-testing-quote)  
call us at **800.497.6752**  
or email us at [techsales@NSLanalytical.com](mailto:techsales@NSLanalytical.com)

216-438-5255 | [mgorris@NSLanalytical.com](mailto:mgorris@NSLanalytical.com)  
Melissa Gorris, Ophthalmic Market Development Director



# Ophthalmic

**NSL Analytical has a long history in specialty testing.** Lens, sunglasses and frame manufacturers depend on NSL Analytical's scientific approach to ophthalmic testing. Our services are built on our greatest strengths — knowledge of materials, fast turnaround times and a reputation for reliable results.

NSL Analytical is a member of The Vision Council, and our ophthalmic evaluation and testing services for manufacturers and regulatory testing conform to industry and TVC standards.



## Select Instrumentation:

- Optical with Digital Imaging
- Bayer BTE
- Taber Bayer Abrader
- STE
- 6 — position Linear Abrader
- ISO 8980-part 4 specified Rub Tester
- KRÜSS Goniometer
- BYK Gardner Haze Meter
- Tumbler
- Cycle Humidity Oven
- QUV Accelerated Weathering
- Spectrophotometer
- A&R Dual Lens Mapper
- 50" Drop Ball Tester
- Photochromic Analyzer
- GC-MS
- Laser Diffraction Particle Size Analyzer - Malvern Mastersizer 3000
- FTIR
- ICP-MS
- Scanning Electronic Microscope

## About NSL Analytical Services, Inc.

A recognized leader in analytical testing, NSL is an Independent Commercial Testing Laboratory providing **Inorganic Elemental and Organic Compound Chemical Analysis, Mechanical Testing and Metallurgical Evaluations, Optical Microscopy and SEM Imaging, and Polymer Materials Testing.** NSL Analytical helps customers achieve the highest standards of product quality from design to launch by providing accurate, reliable and repeatable materials testing results.



**NSL Analytical Services, Inc.** | 4450 Cranwood Parkway | Cleveland, OH 44128  
**800.497.6752 | [NSLanalytical.com](http://NSLanalytical.com)**

**NSL Analytical**  
4450 Cranwood Parkway  
Cleveland, OH 44128  
Phone: 1.216.438.5200  
Fax: 1.216.438.5050

**NSL Metallurgical**  
4535 Renaissance Parkway  
Cleveland, OH 44128  
Phone: 1.216.475.9000  
Fax: 1.216.475.9002

