

# CRIZAL® LENS PORTFOLIO



		CRIZAL PORTFOLIO							COMPETITORS <sup>1</sup>		
BENEFITS	KEY FEATURES/TECHNOLOGY	Crizal Sapphire UV™	Crizal Avancé UV™	COMING SOON Crizal Alizé UV™	COMING SOON Crizal Easy UV™	Crizal SunShield™	Crizal Lenses with Optifog™	Value AR <sup>6</sup>	A	B	C
Glare Reduction	Anti-Reflective (AR) Technology	✓	✓	✓	✓	✓ <sup>2</sup>	✓	✓	✓	✓	✓
	Enhanced Light Transmission™ (ELT) System	✓									
Scratch Resistance and Durability	Double-Sided Hard Coat	✓	✓	✓	✓	✓	✓	✓ <sup>7</sup>	✓	✓	✓
	SR Booster™ (Increased Scratch Protection)	✓	✓			✓ <sup>2</sup>	✓				
Cleanability	Super-Hydrophobic Top Coat	✓	✓	✓	✓	✓		✓	✓	✓	Regular Hydrophobic
	HSD Process™ (Increased Cleanability)	✓	✓	✓		✓					
	Anti-Static Technology (Repels Dust & Lint)	✓	✓			✓ <sup>2</sup>	✓			✓	✓
Edging Precision	Pad Control System™	✓	✓	✓	✓	✓		✓			
UV Protection	Broad Spectrum Technology	✓	✓	✓	✓	✓ <sup>2</sup>	✓				
Anti-fog	Hydrophilic Top Coat						✓				

## Independent Lab Testing (higher score is better)

Cleanability Testing	Contact Angle	116°	116°	116°	110°	116°	N/A	110°	108°	107°	107°
	Top Coat Durability (after 20,000 cleaning cycles)	98.2%	98.2%	98.2%	83.5%	98.2%	N/A	80.1%	59.7%	63.3%	63.3%
Durability Testing	Bayer ISTM test	12.9	12.9	7.1	6.6	12.9 <sup>3</sup>	12.9	N/A	N/A <sup>4</sup>	7.50	7.50
	Simulated Wear Test (scale 0–5)	4.75	4.75	4.60	4.57	4.75	4.75	4.14	4.54 <sup>5</sup>	4.60	4.60
UV Protection	E-SPF (eye sun protection factor)	25	25	25	25	50+	25	N/A	2	5	5

1 The Essilor lenses were tested against the latest premium lens offerings from major competitors like Hoya, Zeiss and Sola.  
 2 Feature applied on the back side of the lens only.  
 3 Bayer Test performed by depositing the AR Stack on the front side of the lens.  
 4 Essilor is unable to obtain consistent reproducible result. Bayer ISTM test is only one method for determining the overall durability of the lens.

5 Lenses typically tested in polycarbonate material. Due to availability, tested in plastic.  
 6 Please contact your Essilor Representative for a list of available Essilor Value lenses.  
 7 UV cured backside.

Contact Luzerne Optical Laboratories, LTD at 800-233-9637 or on the web at [www.LuzerneOptical.com](http://www.LuzerneOptical.com)

## Anti-Reflective (AR) Technology

Integrated Anti-Reflective (AR) Technology protects your eyes from glare and reflections that cause blurry vision and eye strain. This technology virtually removes reflections from the lens surface, allowing more light to pass through helping patients see better and look better. Moreover, AR Technology reduces nighttime glare from headlights, tail lights and street lights for safer driving and protects your eyes from computer reflections that cause eye fatigue.

## Double-Sided Integrated Hard Coat

The Double-Sided Integrated Hard Coat layer significantly increases the durability and scratch resistance of a lens providing long lasting clarity of vision.

## SR Booster™ (Increased scratch protection)

The new Scratch Resistant (SR) Booster™ Layer added between the hard coat and anti-reflective (AR) layers results in glass class scratch resistance.

## Patented Pad Control System™

The Pad Control System™ layer is necessary for the blocking and edging process. Due to the exceptional Super-Hydrophobic properties of our premium No-Glare lenses, the Pad Control System is applied to enable adhesion of the leap pads to avoid slippage during the edging process.

## Hydrophilic Top Coat

The hydrophilic top coat is deposited on the top layer of an Optifog lens. This layer allows fog (microscopic water droplets) to spread out evenly on the lens creating a transparent layer.

## E-SPF (Eye-Sun Protection Factor)

E-SPF is a new index developed by Essilor, endorsed by Professor K. Citek, O.D., integrating UV protection from UV light coming from both sides of a lens.

## Super-Hydrophobic Top Coat

The Super-Hydrophobic Top Coat layer significantly increases the cleanability of a lens by improving its ability to repel oil, water, and smudges.

## Simulated Wear Test (scale 0-5) (higher score is better)

The Simulated Wear Test consists of five different tests conducted in an attempt to simulate actual everyday wearer conditions for a No-Glare lens. The test includes tumbling lenses in a drum with abrasive material, testing lenses in high humidity chamber and measuring lenses for light transmission.

## Top Coat Durability after 20,000 cleaning cycles (higher score is better)

The Top Coat durability test evaluates the cleanability of a lens over time. It measures the percentage of the Super Hydrophobic Top Coat remaining on the lens after 20,000 cleaning cycles.

## Bayer ISTM Test (higher score is better)

The Bayer ISTM Test evaluates the level of scratch resistance by exposing the lenses to abrasive gravel-like substance in a small shaker pan for 600 cycles. The test measures the light transmission of the exposed lenses.

## Broad Spectrum Technology

Broad Spectrum Technology virtually eliminates UV light reflection into the eyes for long-term eye health, while maintaining maximum visible light transmission for crisper, clearer vision.

## Enhanced Light Transmission™ (ELT) System

The ELT System™ is a unique technology developed by Essilor to maximize light transmission through the lens by even further reducing glare. The foundation of the ELT System is a unique light interference cancelling layer which works in combination with the newly re-engineered high-index hard coat to virtually eliminate bothersome glare and visible reflections.

## Contact Angle (higher score is better)

The contact angle is measured by placing a drop of water on the lens and using sophisticated equipment to measure the angle of the water droplet in relationship to the lens surface. High contact angle lenses repel oil and water more effectively. The higher the contact angle, the easier it is to clean the lens.

## HSD Process™ (Increased cleanability)

The revolutionary High Surface Density™ (HSD) Process improves the strength, uniformity and durability of the Super-Hydrophobic Top Coat, allowing the lens to retain 98% of its performance through the life of the Rx.

## Anti-Static Technology

(Repels dust and lint)

Anti-Static Technology allows lenses to stay cleaner longer by repelling dust and lint particles from the surface of the lens.

**Crizal**<sup>®</sup>  
*Live Life in the Clear*<sup>™</sup>