

## Overview

The following document is a general analysis outlining:

- the competitive advantages of Gauzy's Active PDLC (Laminated and RetroFit) in comparison to direct competitors
- the differences between the three primary types of active glass technologies (SPD, PDLC, and EC)

## We're Different.

As a material science company, Gauzy controls the entire lifecycle of its products, from R&D to production and commercialization. Gauzy is the only company developing and manufacturing both SPD and PDLC, two of the three active light technologies. With dedicated laboratories for both technologies, we synthesize our own materials, refining emulsions and formulations for constant development, improvement, and customization according to the market's needs. Two roll-to-roll on-site production lines in Tel Aviv and Germany ensure delivery of the top LCG® (Light Control Glass) products in the industry. Gauzy's patented hardware, including quality verification tools and controllers, ensure the highest quality end-products with the most impressive electro-optical properties in the industry.

Currently focused on Liquid Crystal based products (PNLC, ChLC, SmLC), and SPD (suspended particle device), Gauzy is always exploring new light control technologies.

Gauzy offers a wide variety of Laminated or Retrofit LCG® films: SPD, and LC based white, dark, patterns, colors, active and passive projection films, IR solar control, and high temperature features.

Gauzy's worldwide distribution network consists of over 50 trained and certified glass processors worldwide, bringing LCG® technology to global brands in more than 40 countries.

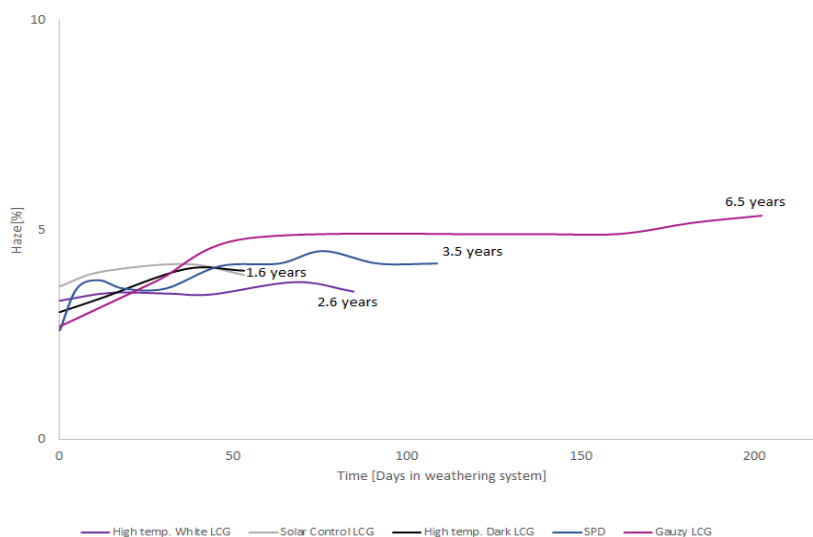
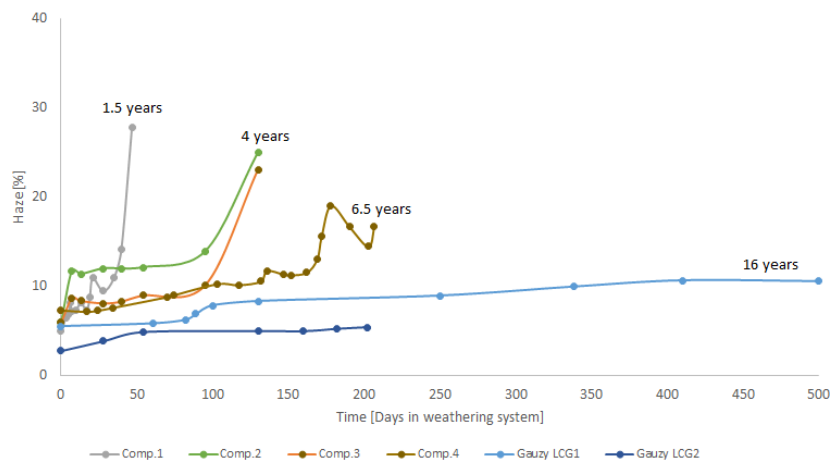
## Gauzy Active PDLC vs Competitors

Feature	Gauzy Retrofit	Gauzy Embedded	DMD	Polytronix
Privacy Level	Excellent	Excellent	Fair	Very Good
Haze [%]	<3%	Avg. 2.5%	6.5	7.9
Maximum Light Transmittance [%]	81	81	80	70
Switching Speed [ms]	10	10	100	100
Power consumption	Ultra-Low	Ultra-Low	High	High
Film Width (m)	1.2	1.8	1.5	1.4
Color Choice	White, grey, colors, RGB, projection, +	White, Grey, Colors, RGB, Projection, +	White, silver	White
Durability	Excellent	Excellent	Fair	Fair
Bi-stability (structural memory)	NA	Possible	Not possible	Not possible
Patterning	Possible	Possible	Not Possible	Not Possible
Scalability (Speed of production)	Fast	Fast	Slow	Slow
Manufacturability	R2R Coating – Roll, Sheet	R2R Coating – Roll, Sheet	Sheet	R2R Coating
Lamination Processing	NA	EVA, PVB, UA	EVA	EVA
Retrofit	Yes Wet (Coat)	NA	Yes Dry (Sticker)	No
Retrofit with scratchproof hard coating	Yes	NA	No	No
Prices of Mass Volumes	Medium	Medium	Medium	Medium-low
Warranty	ND	Pre and Post lamination or process (based on ATE reports)	Pre any lamination or process	Pre any lamination or process
Proprietary Driving Technology	Yes	Yes	No	No
Regulations	UL/CE	UL/CE	-	-
Professional services	Yes	Yes	No	No
Diversity	High - PDLC, PNLC, Nematic LC, Smectic A LC, Cholesteric LC	High - PDLC, PNLC, Nematic LC, Smectic A LC, Cholesteric LC	Low- Singular	Low- Singular
SPD R&D and Manufacturing	In development	Yes	No	No

## Gauzy Durability Performance

Durability tests are performed on Gauzy LCG® with laminated liquid crystal films, in Gauzy’s state of the art Atlas Weathering Machine.

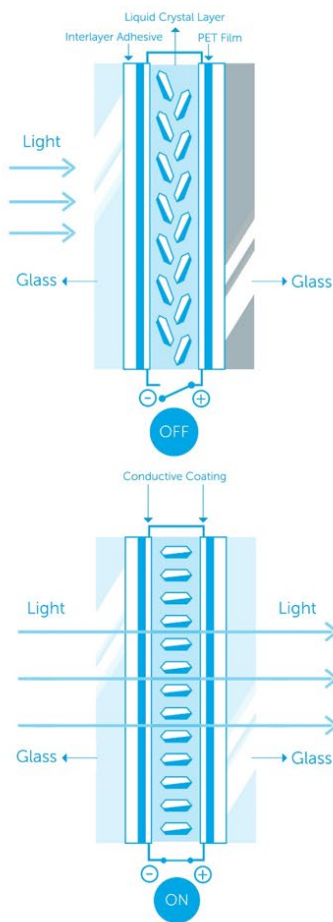
For ISO 4892, 740hr Weather-O-Meter corresponds to 11-month Arizona or 21-month central European climate. Gauzy runs the ISO 4892-2 continuously in parallel with other tests. Gauzy’s White PDLC continues to maintain performance (in terms of life time) after ~16 years. Samples remain in the weathering machine 24hr/day, 360 days/yr with the exception of removal for evaluation. Results are continuously evaluated over set periods of time.



Active Smart Glass Technology Types

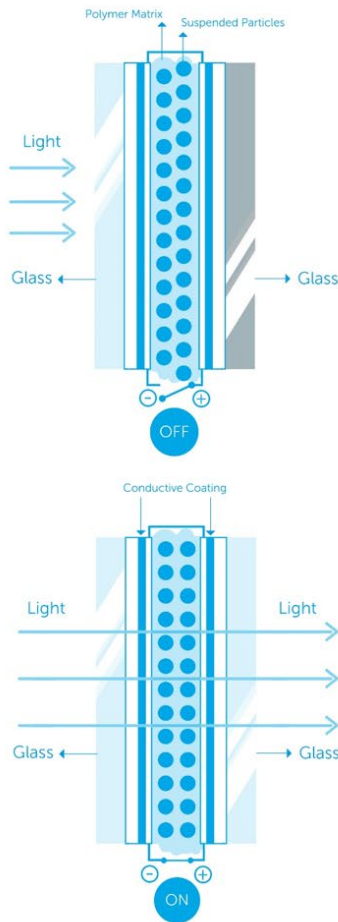
Gauzy is the only material science company in the world currently developing and manufacturing two of the three active light control technologies: PDLC and SPD.

PDLC



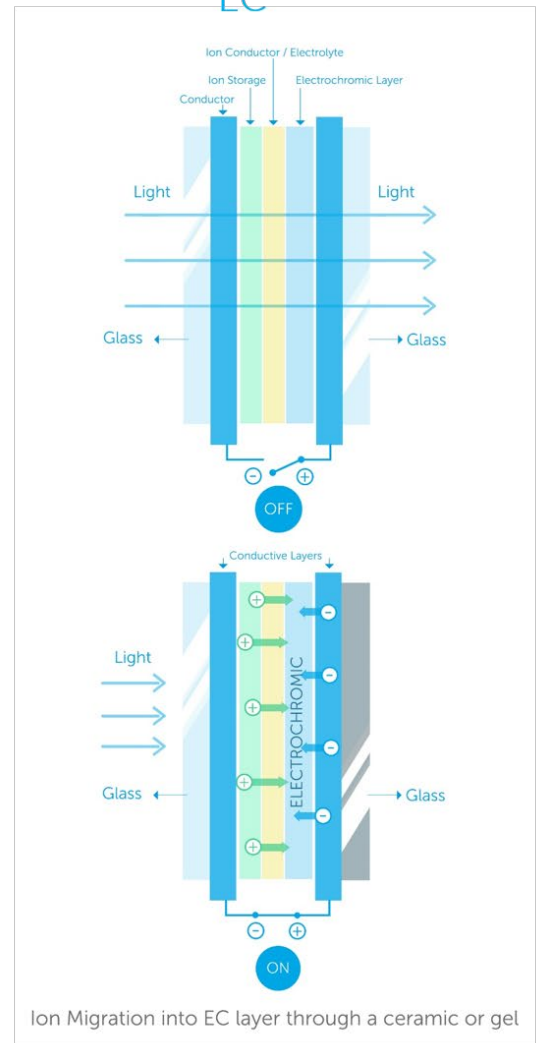
LC alignment with electric field

SPD



Solid Particles alignment with electric field

EC



Ion Migration into EC layer through a ceramic or gel

Active Smart Glass Technology Comparison

	PDLC	SPD	EC	
Film based?	✓	✓	✗	<ul style="list-style-type: none"> <li>Films are easily transportable compared to glass</li> <li>Films can be cut to fit according to customers requirements</li> </ul>
Range of applications				<ul style="list-style-type: none"> <li>EC is only a flat glass technology, which limits its applicability</li> </ul>
Capital intensity				<ul style="list-style-type: none"> <li>EC technology effectively requires glass manufacturing capabilities, which are highly capital intensive</li> </ul>
Haze performance	~3%	~3%	~3%	<ul style="list-style-type: none"> <li>EC can reach 3% only on large glass surfaces</li> </ul>
Speed of change				<ul style="list-style-type: none"> <li>LC works at several milliseconds</li> <li>SPD at hundreds of milliseconds</li> <li>EC extremely slow – into minutes!</li> </ul>
% Min. Transmission	3%	<1%	10%	<ul style="list-style-type: none"> <li>EC cannot reach opacity</li> </ul>
IR reflection ability				<ul style="list-style-type: none"> <li>Higher IR reflection reduces heat transfer</li> </ul>
Potential to be bi-stable?	✓	✗	✗	<ul style="list-style-type: none"> <li>“Bi-stable” means only a pulse of current required to change state (rather than a constant stream of power), which significantly increases energy efficiency</li> </ul>
Potential to retrofit	✓	?	✗	<ul style="list-style-type: none"> <li>SPD currently not suitable</li> </ul>

= least beneficial    = most beneficial

Passive Smart Glass Technology

Gauzy is only focused on Active LCG® technologies.

Passive smart glass technologies are those which do not require electricity to alter states, and include:

- **Thermochromic:** color changes temporarily in response to heat absorption
- **Photochromic:** transitions in response to UV