



Introducing the
Performance Series Micro Silicone Optics












*Type V Wide & Type IV Forward Throw Wide
Distributions*

The Lasting LED Lighting Solution

NLS Lighting Micro Silicone Optics technology elevates quality and performance to an unparalleled level. Competitor's acrylic and polycarbonate lenses yellow or chalk over time. Micro Silicone Optics maintain their clarity. This prevents light blockage in the optic chamber, reducing excessive heat buildup that can lead to accelerated, unpredictable light depreciation. The result is consistent light levels and a longer lifespan for the installation. Vandal-resistant and offering superior clarity, Micro Silicone Optics have become the most durable and reliable solution in the industry.

DOW CORNING LENS YELLOWING CHART

	Silicone	Polycarbonate	Acrylic
Initial			
6,000 Hrs. UV Aging (65° C)			
6,000 Hrs. Heat Aging (130° C)			

Benefits of Silicone Optics

- Proprietary silicone optic designs provide superior coverage and uniformity in IES Distributions for the most demanding lighting applications
- Produces superior 96% clarity to reduce light loss for improved efficacy
- Heat resistant to 150° C, 50% higher than acrylic
- Ecologically friendly
- Vandal-resistant, IK10 compliant
- Does not brittle, crack, or yellow over time
- Complies with IP67 standards at the optic level

Do More With Less

NLS Performance Micro Silicone Optics

New Construction: Saves tens-to-hundreds of thousands of dollars in upfront project costs

Performance Silicone Optics save end users thousands in material and installation costs by reducing the number of poles and fixtures by an average of 15%. Efficient and precise Performance Silicone Optics materially improve pole spacing without sacrificing light levels.

Retrofit: Saves tens-to-hundreds of thousands of dollars in project life cycle energy

Performance Silicone Optics provide substantial energy savings while markedly outperforming industry benchmarks for light output depreciation and illumination quality.

Performance Plus Solution

Light Pattern Optimization + Lumen Maintenance Longevity + High Efficacy + Visual Comfort

Performance Plus solutions combine Performance Micro Silicone Optics with maximum LED count at lower drive currents. This strategy enhances luminaire efficiency, visual comfort, and the reduced maintenance costs already associated with NLS's Performance Micro Silicone Optics. It can also deliver an additional 20% in savings for both new construction and retrofit projects.

New Construction Benefits

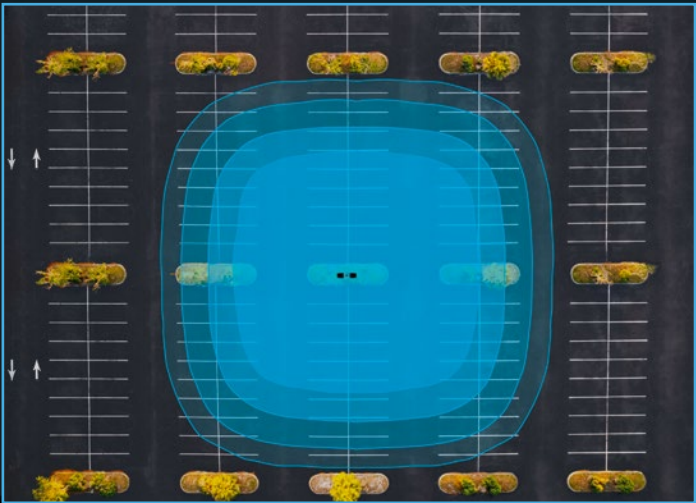
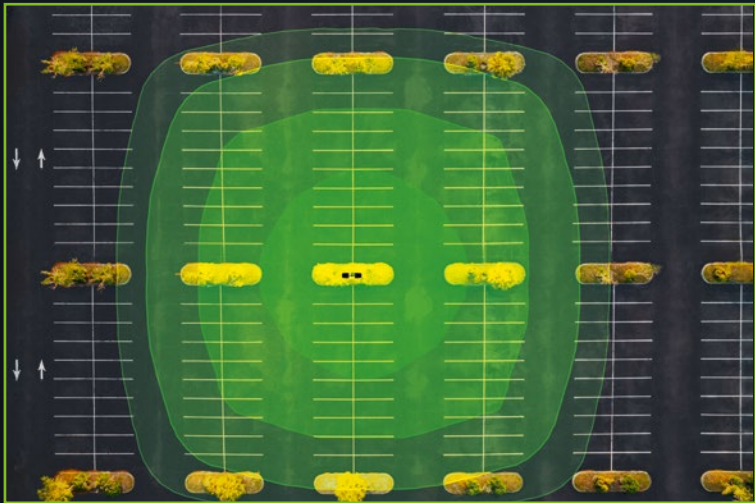
Type V Wide (T5W) Silicone Optic leads the industry with light level uniformity & pole spacing while improving safety, security, and energy efficiency.

Type V Wide uses 20%+ fewer poles on a typical new installation. While lighting system costs for new construction vary by application and job site specifics, NLS Lighting's new optical systems deliver industry leading performance and reduce overall lighting costs by increasing the distance between the luminaires and their associated poles without compromising photometric performance, safety, security, and energy efficiency.

Competitor - 186', three island distance between poles with min. of 0.5fc

NLS - 248', four island distance between poles with a minimum of 0.7fc

At a 33ft mounting height NLS' T5W can light a distance of 4 islands, while our competitor can only light a 3 island distance in a typical parking lot layout.



Retrofit Application Benefits

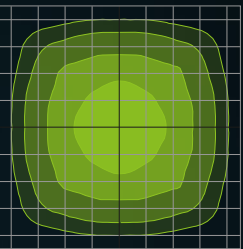
Improved Light Levels • Lower Wattage
Better Performance/Fewer Luminaires • Less Maintenance

Utilizing NLS Lighting's new Type V Wide silicone optics on retrofit Applications gives the lighting designer flexibility to maximize energy savings, increase the light levels, and improve light level uniformity. It's the no compromise upgrade solution.

We improve uniformity by eliminating the wasted lumens directly below the fixture that spikes your Max/Min ratios and compromises your Avg/Min ratios, ultimately creating gaps in your coverage.

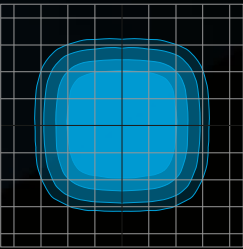
In the example below, the lighting designer chose to increase the light levels using the same wattage luminaire. However, they could have reduced the system wattage by approximately 2/3 to achieve comparable light levels with a 4X improvement in uniformity.

186' x 186' Pole Spacing
(typical for a large retail parking lot application)



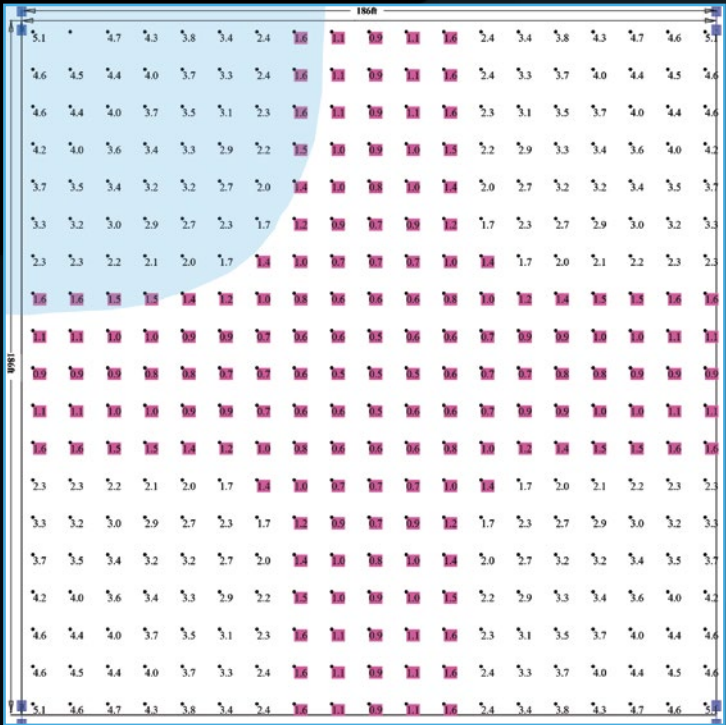
NLS maintains a minimum of 1.7fc utilizing 274 watt luminaires. No points are less than 1.7fc.

■ NLS T5W
■ Less Than 1.7fc



The competitor only achieves a minimum of 0.5fc utilizing 277 watt luminaires. Any value below 1.7 footcandles is highlighted.

■ Competitor's T5W
■ Less Than 1.7fc



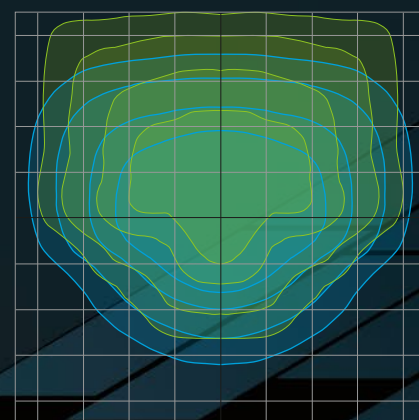
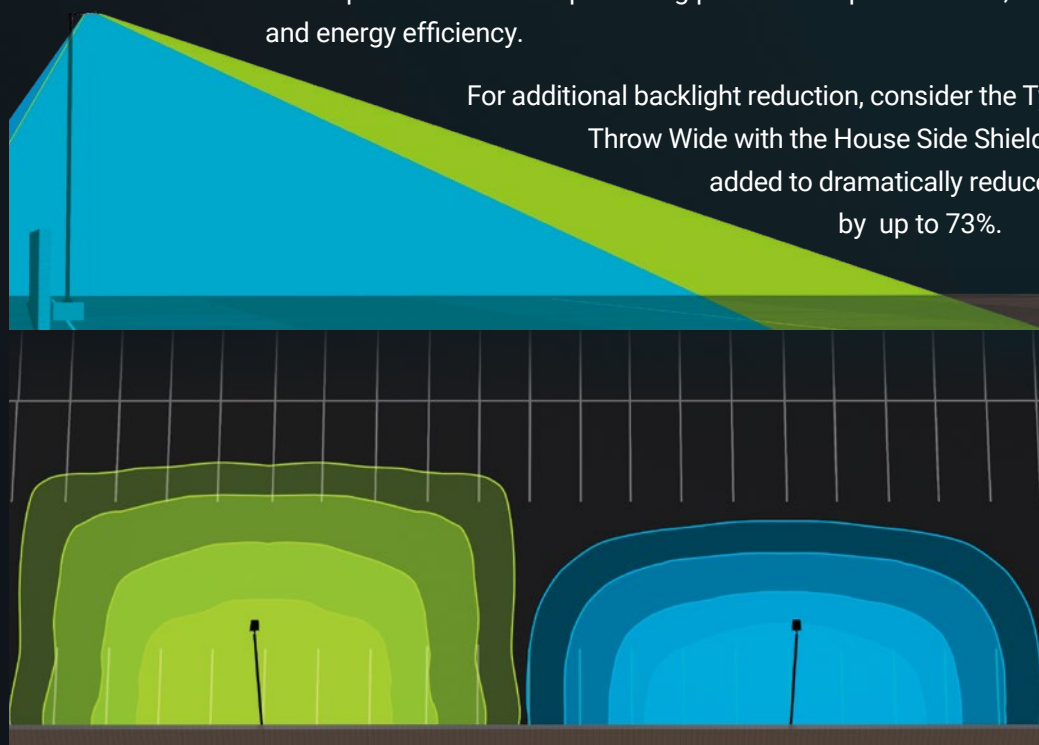
Fixture @ 33' Mounting Height	Nominal Watts	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
NLS Lighting's New T5W Performance	274	Illuminance	Fc	2.22	4.1	1.7	1.31	2.41
Competitor's T5W Performance	277	Illuminance	Fc	2.50	5.3	0.5	5.00	10.60



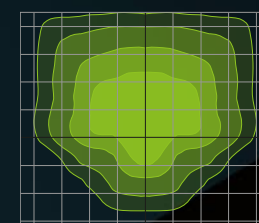
Type IV Forward Throw Wide (T4FTW) optic uses 15%+ fewer poles on a typical new installation, while on a retrofit layout your footcandle values would increase

The Type IV Forward Throw Wide optic is the perfect perimeter optic distribution to be matched with the Type V Wide. Offering expanded coverage and superior uniformity for perimeter lighting. NLS Lighting will be able to help reduce overall lighting costs by increasing the distance between the luminaires and their associated poles without compromising photometric performance, safety, security, and energy efficiency.

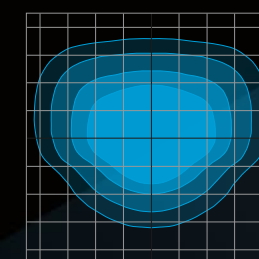
For additional backlight reduction, consider the Type IV Forward Throw Wide with the House Side Shield (HSS) option added to dramatically reduce the backlight by up to 73%.



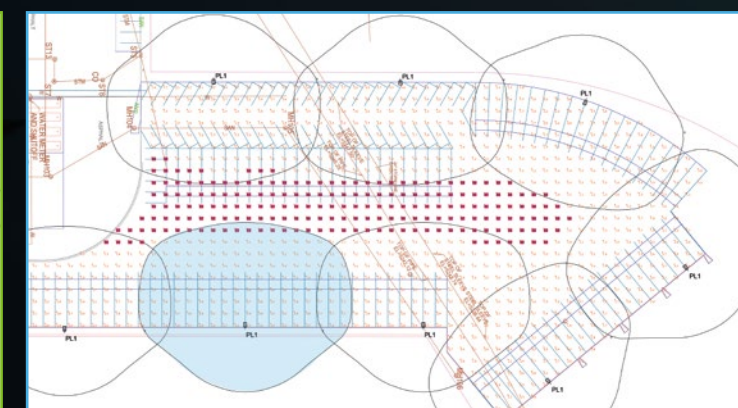
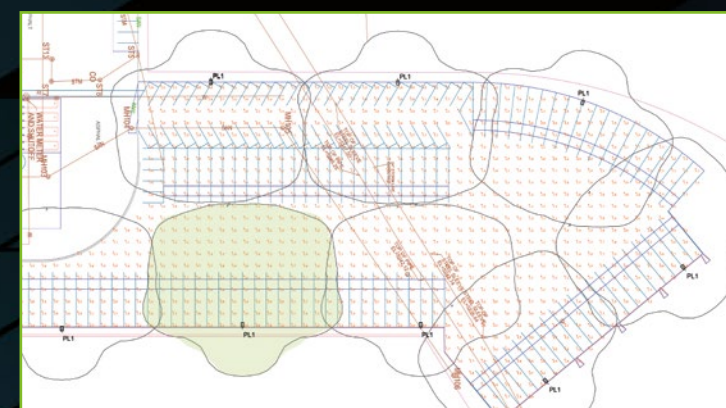
■ NLS T4FTW
■ Competitor's T4FT



■ NLS T4FTW
■ Less Than 1.0fc



■ Competitor's T4FT
■ Less Than 1.0fc



Fixtures @ 39' Mounting Heights	Nominal Watts	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
NLS Lighting's New T4FTW Performance	410	Illuminance	Fc	1.77	3.9	1.0	1.77	3.90
Competitor's T4FT Performance	410	Illuminance	Fc	1.54	3.7	.6	2.57	6.17



FIXTURES & POLES | BUY AMERICA(N) | QUICKSHIP FLASH



AREA, SITE
& ROADWAY



ARCHITECTURAL
& DECORATIVE
POST TOP



BOLLARDS
& COLUMNS



FLOODLIGHTS



WALL MOUNT



GARAGE, CANOPY
& CEILING



TENNIS &
PICKLEBALL



POLES
& BASES



ARMS



ACCESSORIES

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