

## OVERVIEW

LightFlex™ LED is the industry's first commercial daylighting system with integrated tunable-white LED and lighting controls. It provides electric light, natural light, or a combination of both via the same lighting fixture.

The integrated daylighting sensor works in conjunction with the nLight® controls system so the LEDs can supplement daylight coming through the tubular system when more light is needed which optimizes energy savings and maximizes occupant access.

Lightflex™ LED tunable-white is perfect in indoor applications such as classrooms, offices and conference rooms as it allows the LED light color temperature to be adjusted by the occupant to support various application-based tasks such as reading, meeting, teaching, or other uses.



eldoLED



## DIFFUSER/LENS OPTIONS



## OPTICS

Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Five diffuser choices available – curved and square designs with linear prisms or a smooth frosted finish.

## A+ CAPABLE LUMINAIRE

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

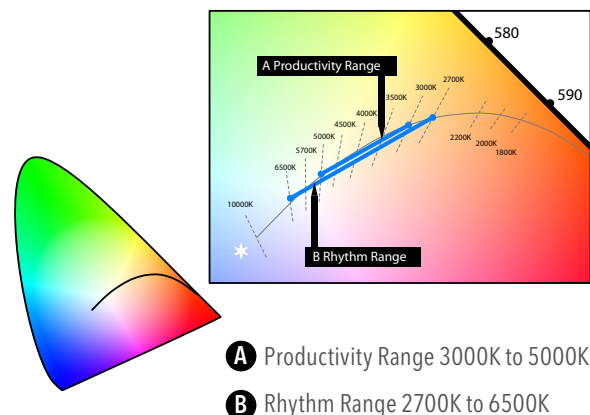
To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

## HIGHLIGHTS

- Simplifies design to implement daylight harvesting
- Provides color uniformity while providing the benefit of natural light throughout the day
- Reduces clutter in the ceiling and redundant lighting systems
- Provides the benefit of tunable-white lighting from 2700k-6500k during "LED-On" mode

## RHYTHM and PRODUCTIVITY RANGE



# LIGHTFLEX™ LED (SLFTL) tunable-white LED

## CONSTRUCTION

LightFlex™ LED shall be Sunoptics® model SLFTL as manufactured by Sunoptics, an Acuity Brands Company, 6201 27th Street, Sacramento Ca. 95822 916/395-4700.

Signature™ Series Prismatic Skylight frame shall be fabricated from 6063-T5 aluminum, finish to be natural mill. Frames shall have integral condensation and weepage gutters which drain interior moisture to the outside. Corners shall be mitered and welded. The acrylic glazing shall be separated from the skylight frame with a Silicon Seal.

The integral curb shall be fabricated from .063" sheet aluminum on the exterior, corners heli-arc welded, and include a rigid insulation. The -21" (533mm) diameter light well and elbows shall be fabricated from 98% reflective MIRO-SILVER® with greater than 99% specular quality.

Round-to-square transition fabricated from 98% reflective MIRO-SILVER® with greater than 99% specular quality with integrated diffuser door frame. Multiple lens options available with differentiating luminous patterns and designs.

LED boards are accessible from below; driver is accessible from the plenum.

## ELECTRICAL

### Mainstream Dynamic Tunable White using nTune™ Technology:

nLight® enabled luminaires with nTune™ technology allow for all digital light color temperature control. This brings tunable white lighting control into the mainstream with repeatable, consistent results in an economical luminaire form and system already familiar to schools. Designers and facility operators are granted the freedom to tie scenes to specific activities or to complement colors or materials within a visual environment. nTune™ allows color temperature settings through the Rhythm Range of 2700K-6500K. The LightFlex LED also includes a digital nIO to control the Tunable White light allowing manual digital light color temperature control.

Refer to the Programming User's Guide for instructions on customizing to your application with SensorView™.

**Integrated Sensor (nLight® Wired Networking):** This sensor is nLight® enabled, meaning it has the ability to communicate over the nLight® network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. The integrated sensor controls daylight harvesting and will close the louvers at night to help increase the performance of the LED's as well as diminish any light pollution.

**Single Blade Louver:** Louvers shall be electrically operated using Sunoptics standard synchronous 120VAC motor unit. The 60hz, 7 Watt motor shall be integrated to the louver assembly and shall be equipped with limit switches at full open and closed positions drawing 6 amps.

**Manual Louver Control:** The LightFlex LED system includes manual control for the integrated louver giving the ability to effectively turn off the daylight.

**Driver:** eldoLED® constant current driver option delivers choice of dimming range for ultra- smooth dimming resolution from 100% to less than 1%, and choices for control, while assuring flicker free, low current inrush, 89% efficiency and low EMI.

## LISTINGS

HVHZ Approved.

FM Approved.

AAMA Certified.

NFRC Certified.

UL Certified to meet U.S. and Canadian standards,

### Skylight Hail Class Rating

Material Type	Lens Material	Resistance Rating	Hail Size
Acrylic	CC2CL1	Class 1	1-1/4"
Acrylic	CC2CL3	Class 3	1-3/4"
Polycarbonate over Acrylic	CC1CC2	Class 4	2"
Polycarbonate	CC1	Class 4	2"

## CLEANING ACRYLIC LENSES

Frequency of cleaning is determined by site conditions. When cleaning acrylic lenses, use only water or water with a mild soap. Use a soft rag to minimize scratching the acrylic. A pressure washer is acceptable to use as well. Never use ammonia, aromatic or petroleum based products to clean acrylic lenses. This will cause deterioration and cracking of the lens and will void the warranty.

Skylights should not be installed in locations with an operating temperature in excess of -75°F (-59.4°C) or 180°F (82°C).

## WARRANTY

10 year and 15 year limited warranty available. Complete warranty terms located at:

[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

## NOTE

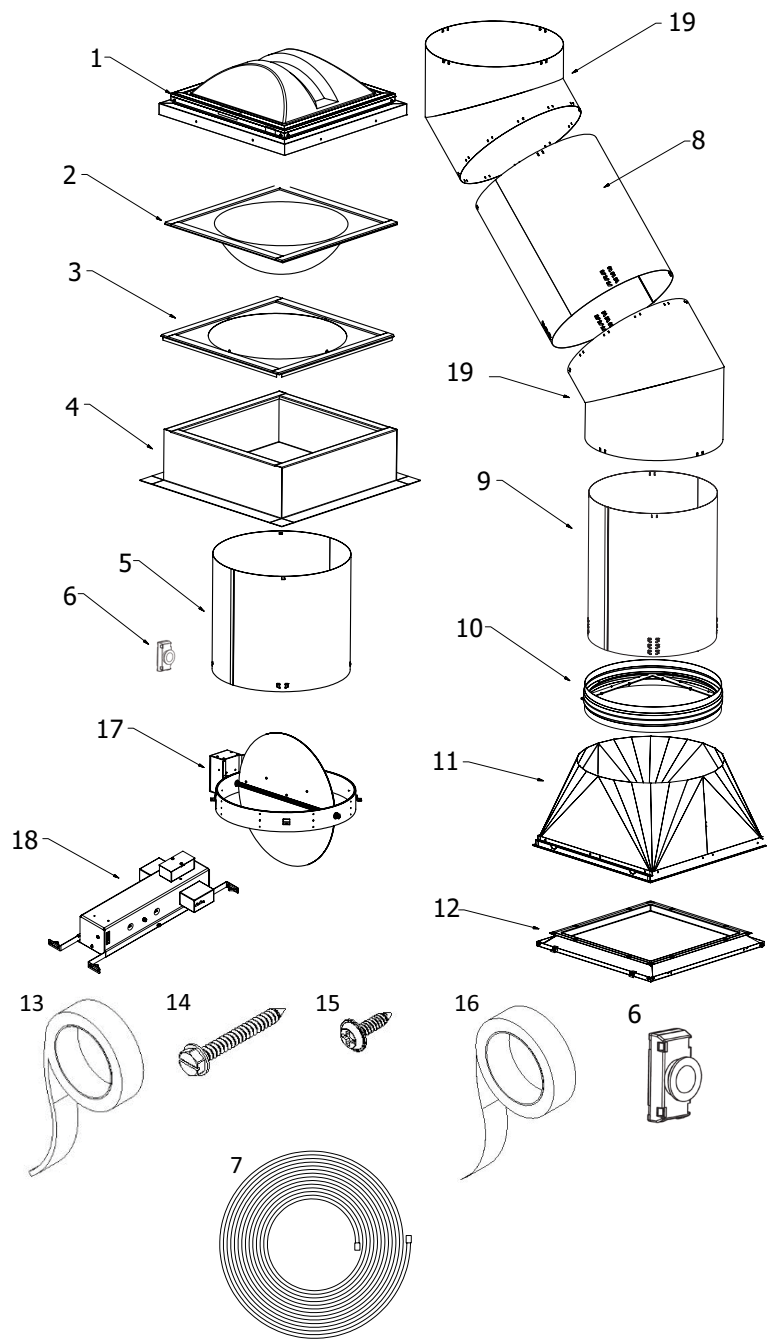
Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 77°F (25°C).

Specifications subject to change without notice.

LIGHTFLEX™ LED (SLFTL) tunable-white LED

CLOSED CEILING INSTALLATION ONLY

The Sunoptics LightFlex™ LED system is design to be installed in suspended ceilings with T-Bar supports.

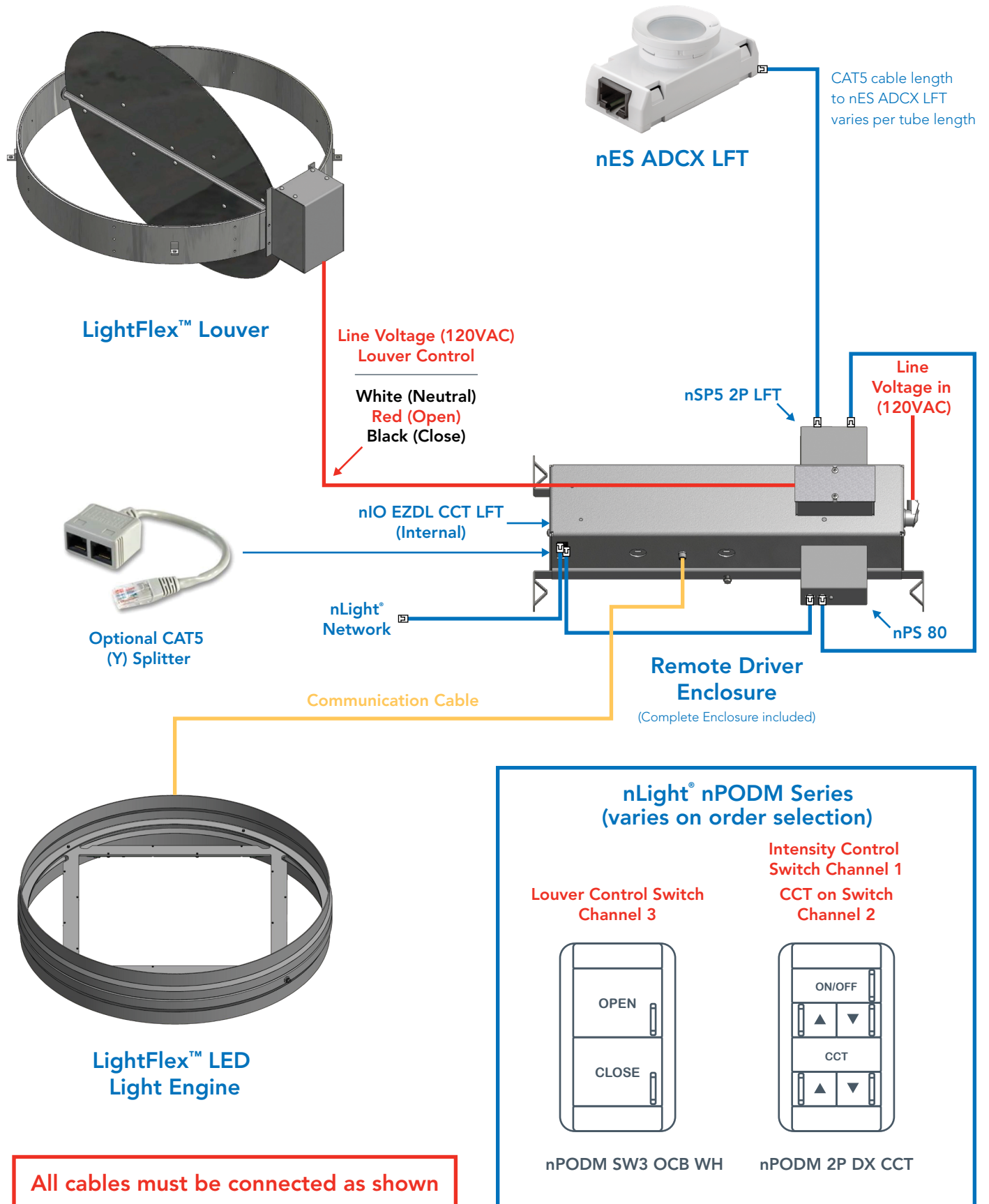


Roof Curb	Required Curb Dimensions
Outside Dimensions	25" (635mm) x 25" (635mm)
Inside Dimensions	22" (559mm) x 22" (559mm)

PARTS LIST		
ITEM	DESCRIPTION	QTY
1	SIGNATURE SERIES SKYLIGHT ASSEMBLY	1
2	OPTICS SPHERE	1
3	CURB TRANSITION	1
4	CURB	1
5	18" ROOF CURB TOP TUBE <sup>1</sup>	1
6	nES ADCX LFT	1
7	CAT 5 Cable for nES ADCX LFT - 10ft.	1
8	24" LIGHT WELL TUBE #1 <sup>1</sup>	X
9	24" LIGHT WELL TUBE #2 <sup>1</sup>	1
10	LIGHTFLEX LED	1
11	ROUND-TO-SQUARE TRANSITION <sup>1</sup>	1
12	TROFFER LENS	X
13	WEATHER STRIPPING (ROLLS)	X
14	#10 DRILL TIP SCREWS	X
15	#8 DRILL TIP SCREWS	X
16	FOIL TAPE (ROLLS)	1
17	SINGLE BLADE LOUVER <sup>1</sup>	1
18	REMOTE DRIVER ENCLOSURE	1
19	ADJUSTABLE 0-45° ANGLE TUBE <sup>1</sup>	1 Set

NOTES:  
X - Quantity Required is based on application and Customer Order.  
1) CAUTION: Handle Reflective Material with Care.  
\*All Tubes & Elbows are fabricated from 98% Spectrally-Reflective Material.  
\*\*Verify all materials are on site, and available for installation.

## LIGHTFLEX™ LED (SLFTL) tunable-white LED



# LIGHTFLEX™ LED (SLFTL) tunable-white LED



A+ Capable options indicated by this color background.

## ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** SLFTL TUWH RHYR NLT 80CRI 2108 SGZ CC2CL1 ALLED 6FT

SLFTL						
Series	Dynamic feature	Dynamic range	Control Interface Type	LED Color Rendering	Emergency Option	Curb Height
SLFTL LightFlex Tubular LED	TUWH Tunable white	RHYR 2700K-6500K (Default) PROR 3000K-5000K	NLT nLight nTune Interface	80CRI 80+CRI (Default) 90CRI 90+CRI	blank Remote Driver Enclosure without Battery Pack (Default) E10W Remote Driver Enclosure with Battery Pack	2108 8 inch (203mm) (Default) 2114 14 inch (356mm)

Skylight Glazing	Skylight Lens Material	Diffuser Lens Style	Light Well Length	Option Group
SGZ Single Glaze (Default) DGZ Double Glaze	CC1 Polycarbonate CC1CC2 Polycarbonate/ Acrylic CC2CL1 Acrylic Class 1 (Default) CC2CL3 Acrylic Class 3	TLSBOX TLED Shadowbox Lens Assembly TLA19 A19 Lens Assembly TLMICPRIS TLED Microprism Lens Assembly TLSATIN TLED Satin Lens Assembly ACL ACLED Troffer Lens Assembly ALLED ALLED Troffer (Default) MG2WHFL Magellan White Flat Round Lens MG2WHPR Magellan White Prismatic Round Lens  Note: Magellan lens options for Dry Wall/Hard ceiling applications only.	4FT 4-Foot (1219mm) Shaft - Max Length 60" 6FT 6-Foot (1829mm) Shaft (Default) - Max Length 82" 8FT 8-Foot (2438mm) Shaft - Max Length 104" 10FT 10-Foot (3048mm) Shaft - Max Length 126" 12FT 12-Foot (3658mm) Shaft - Max Length 148" 14FT 14-Foot (4267mm) Shaft - Max Length 170" 16FT 16-Foot (4877mm) Shaft - Max Length 192" 18FT 18-Foot (5486mm) Shaft - Max Length 214"  Note: - Max length measured is total tube length (allowing for 2" overlap) using 24" lengths.	ELBOWS2 Additional set of Elbows for 90 degree Turns SUSKIT Suspension Wire Kit SBAR Security Bar DWGA* Dry-Wall Grid Adapter  *Only available with Magellan Lens options and must be ordered with Megellan lens

nLight® Control Accessories:	
Order as separate catalog number. Visit <a href="http://www.acuitybrands.com/products/controls/nlight">www.acuitybrands.com/products/controls/nlight</a> .	
<b>WallPod stations¹</b>	<b>Model number</b>
Louver Control	nPODM SW3 OCB WH
On/Off, Intensity Adjustment & CCT Control	nPODM 2P DX CCT WH
<b>Occupancy sensors</b>	<b>Model number</b>
Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB

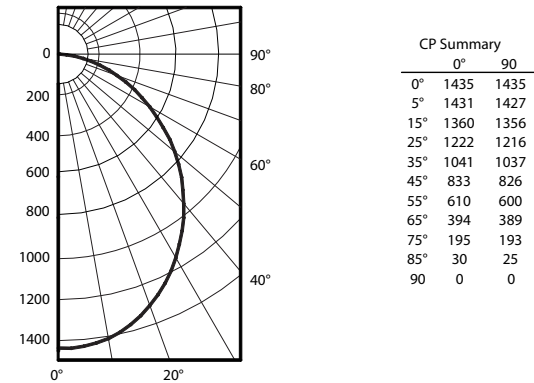
## Notes

¹ Both WallPod Stations required for a fully operational system.

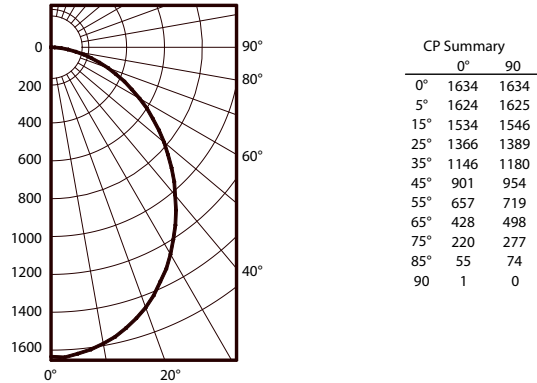
# LIGHTFLEX™ LED (SLFTL) tunable-white LED

## PHOTOMETRY

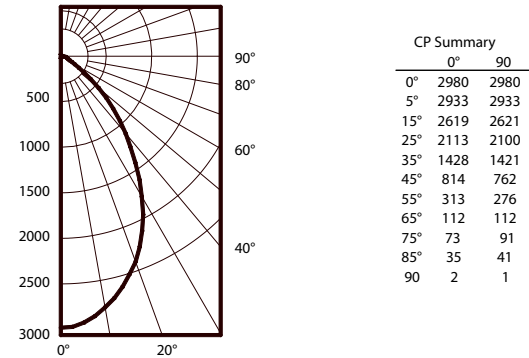
### ACL DIFFUSER @3600K, 80CRI



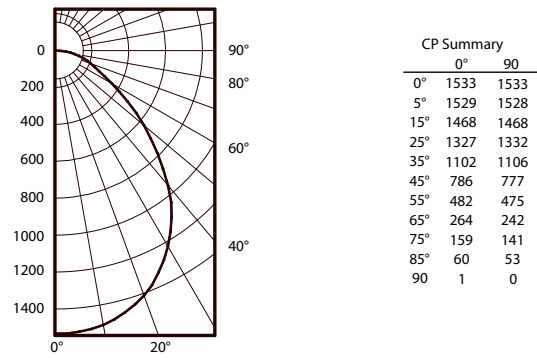
### ALLED DIFFUSER @3600K, 80CRI



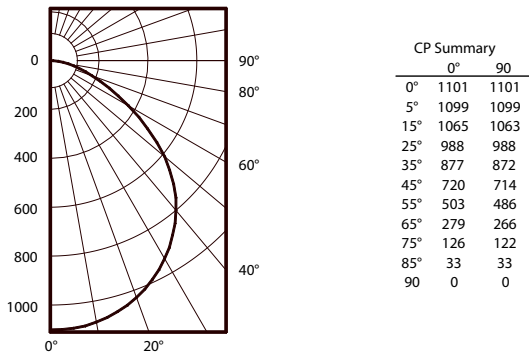
### TLA19 DIFFUSER @3600K, 80CRI



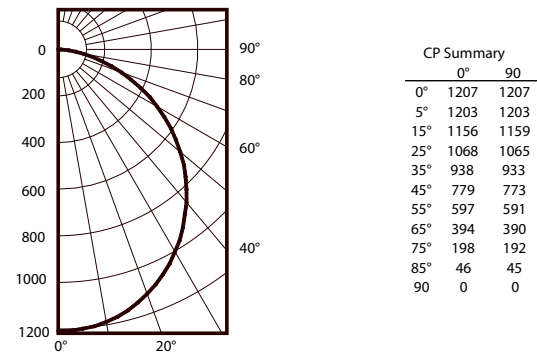
### TLMICPRIS DIFFUSER @3600K, 80CRI



### TLSATIN DIFFUSER @3600K, 80CRI



### TLSBOX DIFFUSER @3600K, 80CRI



### PERFORMANCE DATA (RHYTHM RANGE)

Diffuser Lens	ACL	ALLED	TLA19	TLMICPRIS	TLSATIN	TLSBOX
<b>80CRI</b>						
2700K	3632	4143	4228	3357	2893	3346
3000K	3591	4097	4180	3319	2860	3308
3500K	3536	4034	4117	3269	2817	3258
4000K	3497	3990	4071	3233	2786	3222
4500K	3475	3964	4045	3212	2768	3201
5000K	3468	3956	4037	3206	2762	3195
5700K	3485	3976	4057	3222	2776	3211
6500K	3544	4043	4126	3276	2823	3265

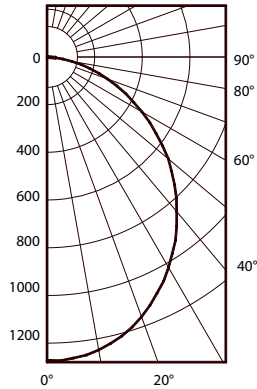
\* Absolute Photometry Results in Lumens, LED Output Only,  
Photometric data has been generated using methods recommended by the IESNA



# LIGHTFLEX™ LED (SLFTL) tunable-white LED

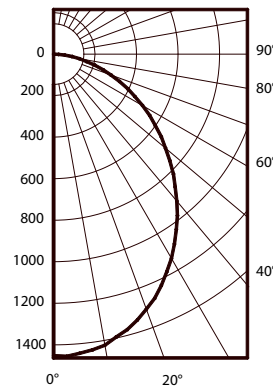
PHOTOMETRY continued...

## ACL DIFFUSER @3600K, 90CRI



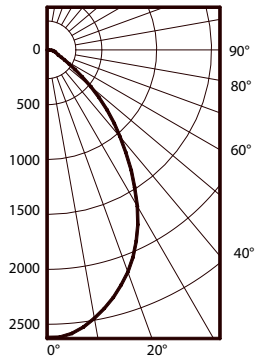
CP Summary	
0°	90°
0°	1271
5°	1268
15°	1206
25°	1086
35°	929
45°	746
55°	549
65°	354
75°	178
85°	30
90°	1

## ALLED DIFFUSER @3600K, 90CRI



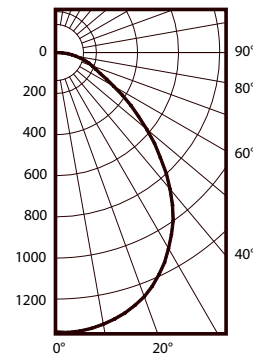
CP Summary	
0°	90°
0°	1452
5°	1444
15°	1369
25°	1233
35°	1052
45°	848
55°	644
65°	441
75°	247
85°	68
90°	0

## TLA19 DIFFUSER @3600K, 90CRI



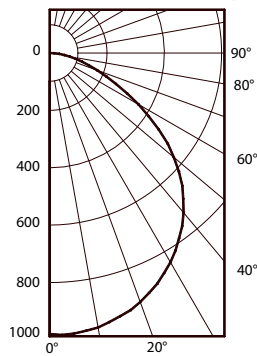
CP Summary	
0°	90°
0°	2619
5°	2575
15°	2297
25°	1865
35°	1256
45°	674
55°	252
65°	99
75°	82
85°	38
90°	0

## TLMICPRIS DIFFUSER @3600K, 90CRI



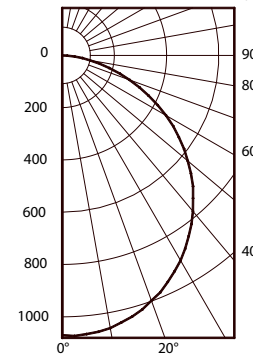
CP Summary	
0°	90°
0°	1359
5°	1357
15°	1306
25°	1185
35°	990
45°	701
55°	431
65°	220
75°	127
85°	51
90°	1

## TLSATIN DIFFUSER @3600K, 90CRI



CP Summary	
0°	90°
0°	979
5°	977
15°	946
25°	879
35°	775
45°	633
55°	431
65°	235
75°	108
85°	27
90°	0

## TLSBOX DIFFUSER @3600K, 90CRI



CP Summary	
0°	90°
0°	1070
5°	1069
15°	1029
25°	947
35°	833
45°	691
55°	528
65°	353
75°	177
85°	42
90°	0

### PERFORMANCE DATA (RHYTHM RANGE)

Diffuser Lens	ACL	ALLED	TLA19	TLMICPRIS	TLSATIN	TLSBOX
<b>90CRI</b>						
2700K	3097	3532	3581	2863	2473	2854
3000K	3107	3543	3593	2872	2481	2864
3500K	3128	3567	3617	2892	2498	2883
4000K	3153	3595	3645	2914	2517	2906
4500K	3182	3628	3679	2941	2541	2932
5000K	3215	3666	3717	2972	2567	2963
5700K	3268	3727	3779	3021	2610	3012
6500K	3339	3808	3861	3087	2666	3077