

# **SAE106**

LINEAR PENDANT INDIRECT/DIRECT

## FEATURES

- Up to 133 lumens/watt efficacy
- Output range from 800 to 1875 lumens/ft
- SpectraSync<sup>™</sup> Color Tuning Technology
- Five downlight distributions available
- 3 SDCM color variation
- 103 degree peak angle



## CONTROL TECHNOLOGY

## SPECIFICATIONS

#### CONSTRUCTION

- Housing 20 gauge formed steel
- Lens extruded acrylic
- End caps 5/16" Die-cast flat aluminum
- 5" Shelf style end caps available (ECSS)
- 80/20 indirect/direct distribution with downlight tray
- 60/40, 40/60, 20/80 and 0/100 distributions provided with downlight tray
- When selected uplight is low peak angle (LPA) by default
- Dust Cover optional, clear acrylic

## OPTICAL PERFORMANCE

- 3 SDCM color consistency
- Softglow (SOF) acrylic lens (shipped installed)

#### INSTALLATION

- Pendant locations at ends of rows (or individual fixtures) are 3%" from fixture ends
- Pendant attachment allows for horizontal adjustment to "finetune" side-to-side leveling
- +  $\frac{1}{16}$ " diameter field-adjustable aircraft cables
- Suspension required at every row joint
- Suspension kits ships separately
- All fixture mounting hardware prepackaged and kitted per row

INSTALLATION (CONTINUED)
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- Hardware kits ships separately
- Row Joining 10-32 machine screws and nuts (provided) are accessible without removal of any components

## ELECTRICAL

- 1C (1 Circuit) Uplight and downlight switched/ dimmed together
- 2C (2 Circuit) Uplight and downlight switched/dimmed separately
- LED boards and drivers can be accessed, removed, and replaced from installed fixture. Contact factory.
- Feed Cord 3-wire, 7 amps max; 4-wire, 7 amps max; 5-wire, 5 amps max
- Canopy Covers Non-feed: 2" diameter (unless 5" non-feed is specified). Feed: 5" diameter

## CONTROLS

- Optional SpectraSync<sup>™</sup> offers two modes of Tunable White solutions and integrates seamlessly into a variety of control systems
- NX Distributed Intelligence<sup>™</sup> provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments
- NX is available in U.S., Canada and Mexico. For other locations consult factory

DATE:	LOCATION:
TYPE:	PROJECT:

## CATALOG #:





RELATED PRODUCTS

#### CERTIFICATIONS

- CSA listed for damp locations
- DesignLights Consortium (DLC) qualified with configurations DLC Premium qualified, see <u>www.designlights.org</u> for specific product offerings
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 8/14/2020. See <u>Buy American Act Solutions</u>. Contact factory for configurations including NX or sensors.

## WARRANTY

- LED boards 5 years
- LED drivers (standard)- 5 years
- See <u>www.litecontrol.com</u> for details

KEY DATA	A
Lumen Range Per Foot	800 - 1875
Wattage Range Per Foot	6.75 - 16
Efficacy Range (LPW)	114 - 119
Rated Life (Hours)	L70: >60,000 L90: up to 55,000





# **SAE106**

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## ORDERING GUIDE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

Example: SAE106-P-LPA-2-4-SOF-C1-30K-080-2D-D01-1C-UNV-FA1

#### CATALOG # SAE 106 Ρ LPA SOF Downlight Diffuser Uplight Distribution Max Length in Row Finish/Color <sup>3</sup> Program Series Mounting Row Length (In Feet) **106** 106 P Pendant LPA Low Peak Angle<sup>2</sup> SOF Soft Diffuse Lens C1 SAE SAE \_' Enter in foot increments 4 4', 1219mm Matte White Program (Default) 8 8', 2438mm CC Custom Color

		]_[			]-			]-			]–			]_			]–[			-
Color ter	nperature		Outp	ut/ft 5		Distri	ibutions 6		Drive	er		Circ	uiting		Volta	ge		Susp	ension Kit <sup>10</sup>	
30K	3000K	[	080	800		2D	80% Up, 20% Down		D01	1% Dimming, 0-10V	1	1C	1 Circuit	1	UNV		] [	FA1	Suspension	1
35K	3500K	1	105	1050		4D	60% Up, 40% Down		D05	5% Dimming, 0-10V <sup>7</sup>		2C	2 Circuit - Uplight/			Voltage			Kit, 51"	
40K	4000K	1	130	1300		6D	40% Up, 60% Down		NDM	Non-Dimming			Downlight <sup>8</sup>			(120V through		FA2	Suspension Kit. 87"	
2750T	2700K - 5000K	1	155	1550		8D	20% Up, 80% Down									277V)		FA3	Suspension	
	SpectraSync™ Tunable White ⁴	1	187	1875		10D	0% Up, 100% Down								347	347 Volt <sup>1, 9</sup>		FAJ	Kit, 219"	
2765T	2700K - 6500K SpectraSync™ Tunable White <sup>4</sup>																		Suspension Kit, 363"	

## OPTIONAL

Nightlight Emergency	Patterns	Thru-wiring Du	ust Cover End Cap-shelf Style	T-Bar Clips 14
NL Nightlight Circuit Required " EF 10W Emergency Battery Pack <sup>12</sup>	PTRN Contact Factory for pattern configurations. Approval drawings required.	W2 Provide Normal and Emergency/ Nightlight Thru Wiring <sup>13</sup> L1   W3 Provide Normal Thru Wiring Only Image: Comparison of the second secon	Clear Acrylic Dust Cover Lens Ecss End Cap, Shelf Style, 5"	CB1   T-bar clip - 15/16"     CB2   T-bar clip - 9/16"     CB3   T-bar clip - 9/16" SS

Control Options	\$					
NX Standalone						
NXS	NX, PIR BT Occupancy/Daylight Sensor, Slide Mount <sup>15,16</sup>					
NX Networked	– Wired					
NXE	NX, Dual SmartPorts <sup>15, 16</sup>					
NXES	NX, PIR BT Occupancy/Daylight Sensor, Slide Mount, Dual SmartPORTs <sup>15, 16</sup>					
NX Networked	– Wireless					
NXSW	NX Wireless, PIR BT Occupancy/Daylight Sensor <sup>15, 16</sup>					
NXWE	NX Wireless Wireless Enabled 15, 16					
Sensors						

#### SD1 Daylight Sensor Required

SO4 Occupancy Sensor Required

#### Notes:

- 1 Additional lead time may be applicable. Contact factory.
- 2 Not applicable for 10D distribution.
- 3 Visit <u>www.litecontrol.com/finishes</u> for details.
- 4 Must be ordered with D05 Driver option.
- 5 Choose one output.
- 6 Percentage above output.
- 7 Must be ordered with 2750T or 2765T options
- 8 Not available with 2D or 10D distribution
- 9 Excludes Emergency Battery Option
- Add suffix /V to replace all 2" non-feed canopy covers with 5" canopy covers. FA1/V = 51" suspension kit w/5" canopies; Canopies and feed cord are supplied in white regardless of fixture color unless otherwise specified. For dual feed contact factory.
- 11 Enter quantity. 2NL = 2 nightlight circuits/row
- Enter quantity. 2EF = 2 Emergency batteries/row. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible. Provided by others.
- 13 Only applicable when specified with emergency.
- 14 To be ordered with Luminaire Canopy Box.

#### NX In-Fixture Control Options:

- 15 Refer to NX Integrated Controls Reference Table for Functionality of Options
- 16 NX Sensors with Bluetooth, BLE, provides remote commission only





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DATE:	LOCATION:
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## CONTROLS

## NX Distributed Intelligence<sup>™</sup> Lighting Controls:

Supports both indoor and outdoor applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync Color Tuning Technology.

## **DISTRIBUTED**<sup>®</sup>

	NX INTEGRATED CONTROLS REFERENCE									
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming		
NX Standalone										
NXS	NXSMP-SMI	No	Yes	Yes	Yes	Yes	Yes	Yes		
NX Networked	NX Networked – Wired									
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R <sup>1</sup>		
NXES	NXSMP-SMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
NX Networked	– Wireless									
NXSW	NXSMP-SMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
NXWE <sup>2</sup>	N/A	Yes	Yes	No	No	Yes	Yes	No <sup>3</sup>		
NX Networked	NX Networked – Wired/Wireless									
NXSWD	NXSMP-SMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
NXWD	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R <sup>1,3</sup>		

NXBTC/R needs to be plugged into an available NX SmartPort<sup>™</sup> on the fixture network 1

2 Programming via App requires factory assistance

3 To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

## SpectraSync<sup>™</sup> Color Tuning Technology:

Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



	SPECTRASYNC COLOR TUNING TECHNOLOGY							
Mode	Kelvin Range	Description						
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space						
Scheduled White	2700K-5000K 2700K-6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being						

## SpectraSync Tunable White

Available in two options: 2750T (2700K-5000K) or 2765T (2700K-6500K). Requires two 0–10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

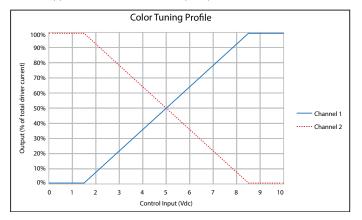


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

## Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence™ Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DVTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers





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	TYPE:	PROJECT:
SAE106	CATALOG #:	

## PERFORMANCE DATA TABLE

LINEAR PENDANT INDIRECT/DIRECT

The table below shows the delivered lumens for the various lumen outputs. Use this chart in connection with the output multiplier capability to deliver any output required.

Nomenclature	Lumens/ft	W/unit	Efficacy
080	800	6.75	119
105	1050	9.25	114
130	1300	11	118
155	1550	13.5	115
187	1875	16	117

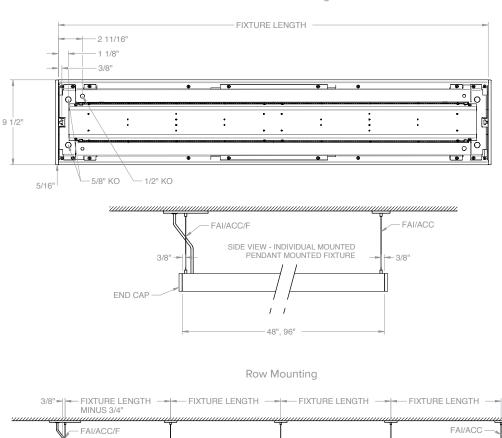
Values are averages of all distributions at 3500K. For each option, see IES files for most accurate performance measures.

#### **Output Multiplier Table**

Photometrics for the SAE104-P are published here at a nominal 3500K temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

Option	3000K	3500K	4000K
Multiplier	0.99	1.00	1.02

## DIMENSIONS



END CAP

SAE106-P

FIXTURE AT END OF ROW

SIDE VIEW - ROW MOUNTED PENDANT MOUNTED FIXTURES

INT FIXTURE

FIXTURE AT END OF ROW

INT FIXTURE



#### Individual Mounting

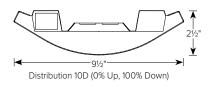


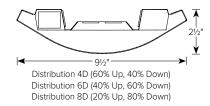
## SAE106 LINEAR PENDANT INDIRECT/DIRECT

## DIMENSIONS CONTINUED

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #	

# CROSS SECTION





## PHOTOMETRY

## SAE106-P-LPA-4-SOF-30K-130-2D

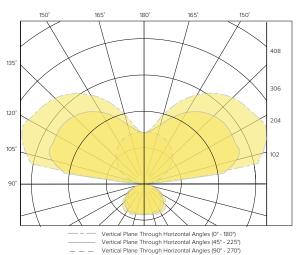
## LUMINAIRE DATA

Test No.	16.02760
Description	9.5 X 48, LED CURV WITH LINEAR FROSTED OPAL LENS
Delivered Lumens	5334
Watts	42W
Efficacy	127
Mounting	Pendant

#### ZONAL LUMEN SUMMARY

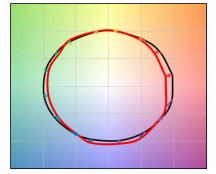
Lumens	% Luminaire
424	7.9
805	15.1
1086	20.4
5334	100.0
	424 805 1086

## POLAR GRAPH



## TM-30 DATA

#### COLOR VECTOR GRAPHIC



#### \*Graphics shown are at 35K

- Reference Illuminant - Test Source

#### COLOR DISTORTION GRAPHIC



TEST RESULTS		
Value	35K	
CCT (K)	3447	
CIE R <sub>a</sub>	83	
D <sub>uv</sub>	-0.0003	
R <sub>f</sub>	82	
R <sub>g</sub>	97	
X	0.408	
у	0.3914	





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DATE:	LOCATION:
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## ADDITIONAL INFORMATION

## <u>Sensor</u>

SD1	Daylight sensor. Installs between light guide panels.
SO4	Occupancy sensor. Installs between light guide panels.
NX	NX sensors installs between light guide panels.

See separate <u>LC-Controls</u> spec sheet for additional details.

## Driver:

D01	100%- 1% dimming range. Fixture will be wired for low voltage 0-10V dimming control.
D05	100%-5% dimming range. Fixture will be wired for low voltage 0-10V dimming control. Only applicable if either 2230TD, 2750T or 2765T is selected.
NDM	Non-dimming. Fixture will be wired for fixed light output.

## Fixture Weight:

3 lbs/ft

#### Rated Life:

Tested in accordance with the LM79-2008 and derived from EPA TM-21 calculator L70: 257,000 (calculated per TM-21 extrapolated curve) L70: >60,000 (reported per TM-21/LM80 6x's limitation)

L90: 55,000 (calculated per TM-21 extrapolated curve)

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