LITECONTROL
making light work™

SAE104
LINEAR PENDANT INDIRECT/DIRECT

SAE

FEATURES

- Up to 137 lumens/watt efficacy
- Output range from 800 to 1875 lumens/ft
- SpectraSync™ Color Tuning Technology
- Five light distribution options available
- 3 SDCM color variation
- 110 degree peak angle

RELATED PRODUCTS

🔗 SAE104-W-ID

DLC QPL™ LISTED   DLC QPL™ LISTED PREMIUM   BUY AMERICAN SOLUTIONS ★ See Certification Specifications

CONTROL TECHNOLOGY

SpectraSync® Color Tuning Technology   NX DISTRIBUTED™ INTELLIGENCE

SPECIFICATIONS

CONSTRUCTION
- Housing - 20 gauge formed steel
- Lens - acrylic
- End caps - ⁵⁄₁₆" Die-cast flat aluminum
- 80/20 indirect/direct distribution without 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 ⅜" from fixture ends
- Pendant attachment allows for horizontal adjustment to "fine-tune" side-to-side leveling
- 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)
- 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™ offers two modes of Tunable White solutions and integrates seamlessly into a variety of control systems
- NX Distributed Intelligence™ 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

CERTIFICATIONS
- CSA listed for damp locations
- DesignLights Consortium (DLC) qualified with configurations DLC Premium qualified, see www.designlights.org 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 Buy American Act Solutions. Contact factory for configurations including NX or sensors.

WARRANTY
- LED boards - 5 years
- LED drivers (standard)- 5 years
- See www.litecontrol.com for details

KEY DATA	
Lumen Range Per Foot	800 - 1875
Wattage Range Per Foot	7.5 - 15.8
Efficacy Range (LPW)	107 - 127
Rated Life (Hours)	L70: >60,000 L90: up to 53,000

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DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ORDERING GUIDE

Example: SAE104-P-LPA-2-4-SOF-C1-30K-080-2D-D01-1C-UNV-FA1

CATALOG # [_____]

SAE	104	—	P	—	LPA	—	—	—	—	—	SOF	—	Finish/Color [3]
Program	**Series**		**Mounting**		**Uplight Distribution**		**Row Length (In Feet)**		**Max Length in Row**		**Downlight Diffuser**		
SAE SAE Program	104 104		P Pendant		LPA Low Peak Angle [2]		__' Enter in foot increments		4 4', 1219mm 8 8', 2438mm		SOF Soft Diffuse Lens		C1 Matte White (Default) CC Custom Color

Color temperature	—	Output/ft [5]	—	Distributions [6]	—	Driver	—	Circuiting	—	Voltage	—	Suspension Kit [10]
30K 3000K		080 800		2D 80% Up, 20% Down		D01 1% Dimming, 0-10V		1C 1 Circuit		UNV Universal Voltage (120V through 277V)		FA1 Suspension Kit, 51"
35K 3500K		105 1050		4D 60% Up, 40% Down		D05 5% Dimming, 0-10V [7]		2C 2 Circuit - Uplight/Downlight [8]				FA2 Suspension Kit, 87"
40K 4000K		130 1300		6D 40% Up, 60% Down		NDM Non-Dimming				347 347 Volt [1,9]		FA3 Suspension Kit, 219"
2750T 2700K - 5000K SpectraSync™ Tunable White [4]		155 1550		8D 20% Up, 80% Down								FA4 Suspension Kit, 363"
2765T 2700K - 6500K SpectraSync™ Tunable White [4]		187 1875		10D 0% Up, 100% Down								

OPTIONAL

Nightlight	—	Emergency	—	Patterns	—	Thru-wiring	—	Dust Cover	—	T-Bar Clips [14]
NL Nightlight Circuit Required [11]		EF 10W Emergency Battery Pack [12]		PTRN Contact Factory for pattern configurations. Approval drawings required.		W2 Provide Normal and Emergency/Nightlight Thru Wiring [13] W3 Provide Normal Thru Wiring Only		L1 Clear Acrylic Dust Cover Lens		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 [15, 16]

NX Networked – Wired
- **NXE** NX, Dual SmartPorts [15, 16]
- **NXES** NX, PIR BT Occupancy/Daylight Sensor, Slide Mount, Dual SmartPORTs [15, 16]

NX Networked – Wireless
- **NXSW** NX Wireless, PIR BT Occupancy/Daylight Sensor [15, 16]
- **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 www.litecontrol.com/finishes 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
10. 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
12. 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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CONTROLS

NX Distributed Intelligence™ 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.

NX DISTRIBUTED™ INTELLIGENCE

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 – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R[1]
NXES	NXSMP-SMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NX Networked – Wireless								
NXSW	NXSMP-SMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NXWE[2]	N/A	Yes	Yes	No	No	Yes	Yes	No[3]
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[1,3]

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

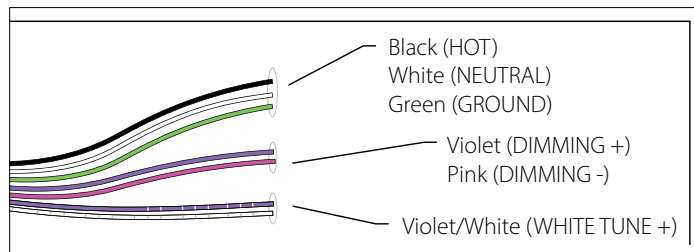### SpectraSync™ Color Tuning Technology:
Control your space based on the needs of the application, specific activities throughout the
day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.

SpectraSync™
Color Tuning Technology

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.

Black (HOT)
White (NEUTRAL)
Green (GROUND)

Violet (DIMMING +)
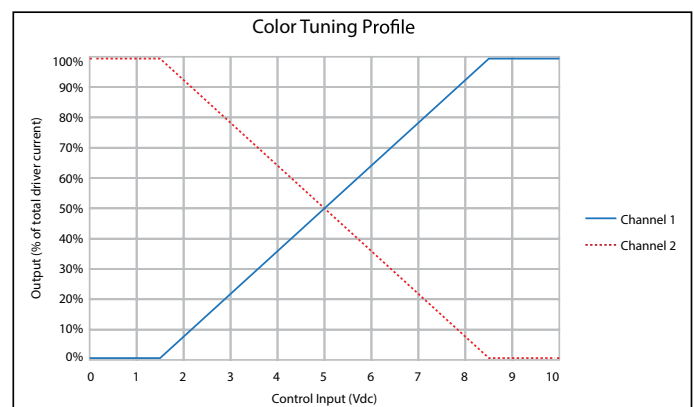Pink (DIMMING -)

Violet/White (WHITE TUNE +)

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

Color Tuning Profile

Output (% of total driver current) vs Control Input (Vdc)

Channel 1
Channel 2

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PERFORMANCE DATA TABLE

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.

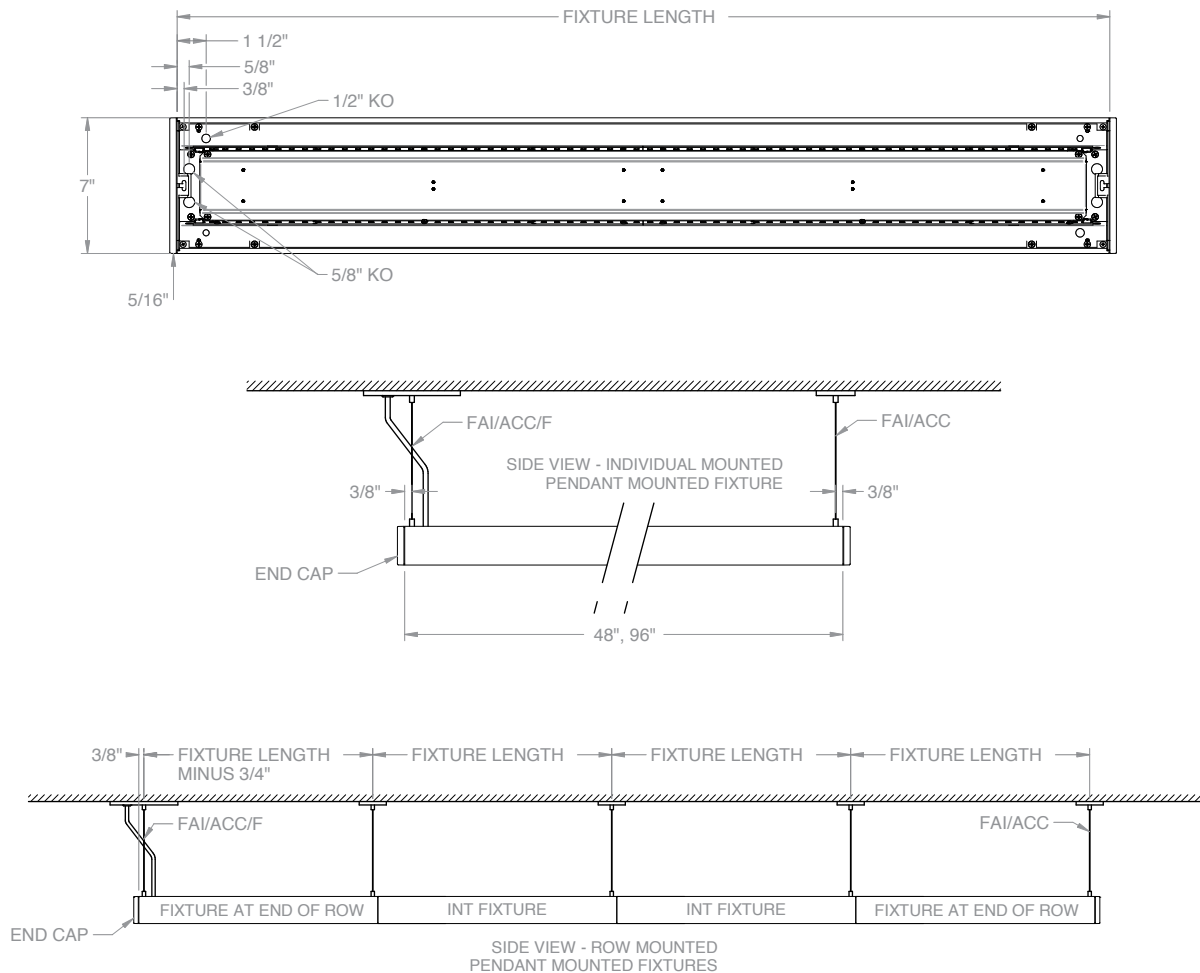| Nomenclature	Lumens/ft	W/unit	Efficacy
080	800	7.5	107
105	1050	9.3	114
130	1300	10.3	127
155	1550	13.3	117
187	1875	15.8	119

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	0.97	1.00	1.01

DIMENSIONS

FIXTURE LENGTH

1 1/2"
5/8"
3/8"
1/2" KO
7"
5/8" KO
5/16"

FAI/ACC/F   FAI/ACC

SIDE VIEW - INDIVIDUAL MOUNTED
PENDANT MOUNTED FIXTURE

3/8"   3/8"

END CAP

48", 96"

3/8"   FIXTURE LENGTH MINUS 3/4"   FIXTURE LENGTH   FIXTURE LENGTH   FIXTURE LENGTH

FAI/ACC/F   FAI/ACC

END CAP

FIXTURE AT END OF ROW   INT FIXTURE   INT FIXTURE   FIXTURE AT END OF ROW

SIDE VIEW - ROW MOUNTED
PENDANT MOUNTED FIXTURES

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DIMENSIONS CONTINUED

CROSS SECTION

2"

3 1/4"
7"

Distribution 2D (80% Up, 20% Down)

2"

3 1/4"
7"

Distribution 4D (60% Up, 40% Down)
Distribution 6D (40% Up, 60% Down)
Distribution 8D (20% Up, 80% Down)

2"

3 1/4"
7"

Distribution 10D (0% Up, 100% Down)
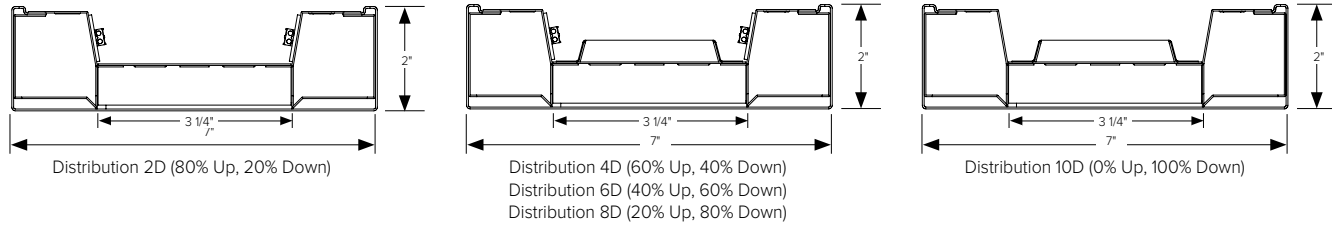
PHOTOMETRY

SAE104-P-LPA-4-SOF-35K-130-2D

LUMINAIRE DATA

Test No.	16.03112
Description	7" X 2" deep LED rectilinear beam shape luminaire
Delivered Lumens	5210
Watts	38W
Efficacy	137
Mounting	Pendant

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	401	7.7
0–60	762	14.6
0–90	1003	19.2
0–180	5210	100.0

POLAR GRAPH

— — — Vertical Plane Through Horizontal Angles (0° - 180°)
——— Vertical Plane Through Horizontal Angles (45° - 225°)
— — Vertical Plane Through Horizontal Angles (90° - 270°)
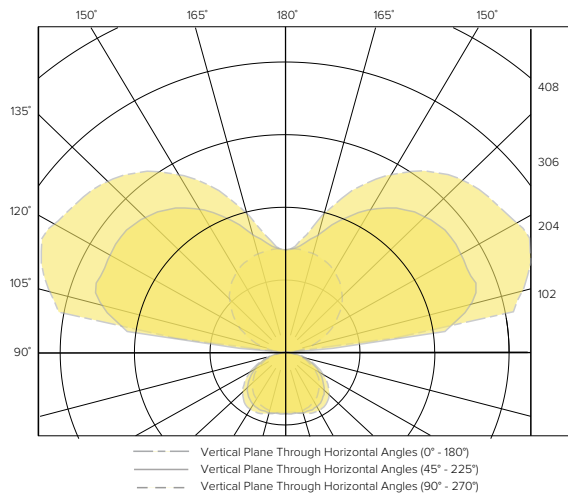
TM-30 DATA

COLOR VECTOR GRAPHIC
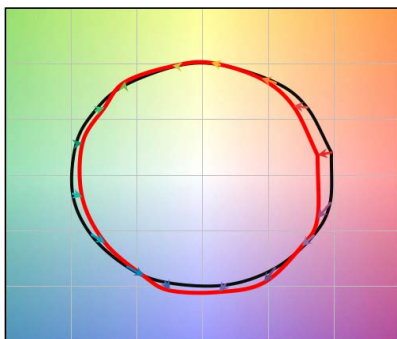
COLOR DISTORTION GRAPHIC
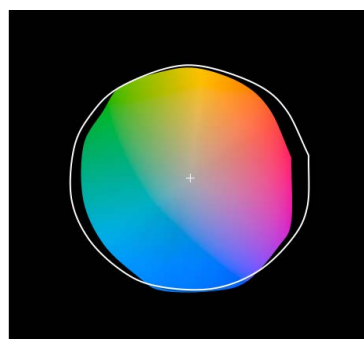
TEST RESULTS	
Value	35K
CCT (K)	3441
CIE R_a	83
D_{UV}	-0.0002
R_f	82
R_g	97
x	0.4084
y	0.3918

*Graphics shown are at 35K

—— Reference Illuminant —— Test Source

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ADDITIONAL INFORMATION

Sensor

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 LC-Controls 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: 53,000 (calculated per TM-21 extrapolated curve)

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