

SAE104

LINEAR WALL INDIRECT/DIRECT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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



CONTROL TECHNOLOGY



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

- Bracket locations at ends of rows (or individual fixtures) are 1-7/16" from fixture ends
- All fixture mounting hardware prepackaged and kitted per row
- Hardware kits ship separately
- Row Joining - 10-32 machine screws and nuts (provided) are accessible without removal of any components

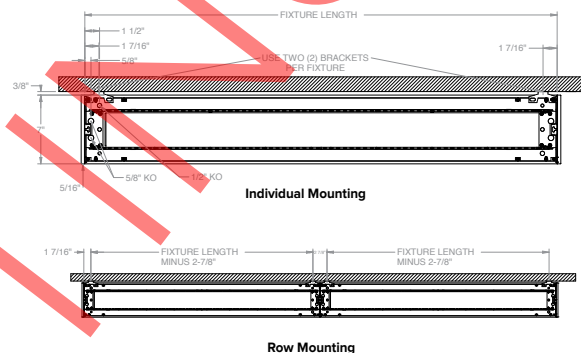
ELECTRICAL

- 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

CONTROLS

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

SAE



	Weight
104-W-ID	3 lbs/ft

CERTIFICATIONS

- CSA listed for damp locations
- DLC V5.1 listed luminaire. Not all product variations listed in this document are DLC qualified. Refer to designlights.org for most up-to-date list.
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225-11). See [Buy America\(n\) Solutions](#).
- Emergency Battery Backup options are California Energy Commission (CEC) Title 20 Compliant.

WARRANTY

- LED boards - 5 years
- LED drivers (standard)- 5 years

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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ORDERING GUIDE

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

CATALOG #

SAE	104	W	LPA			SOF	
Program	Series	Mounting	Uplight Distribution	Row Length (In Feet)	Max Length in Row	Downlight Diffuser	Finish/Color ³
SAE SAE Program	104 104	W Wall	LPA Low Peak Angle ²	' Enter in foot increments	4 4', 1219mm 8 8', 2438mm	SOF Soft Diffuse Lens	C1 Matte White (Default) C2 Textured Matte White C3 Light Silver C4 Machined Aluminum C5 Carbon Black C6 Textured Camera Black CC Custom Color

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

OPTIONAL

Nightlight	Emergency	Thru-wiring	Dust Cover
NL Nightlight Circuit Required ¹⁰	EF 10W Emergency Battery Pack (CEC Title 20 Compliant) ¹¹	W2 Provide Normal and Emergency/Nightlight Thru Wiring ¹² W3 Provide Normal Thru Wiring Only	L1 Clear Acrylic Dust Cover Lens

Control Options	
NX Networked – Wired	
NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor ¹³
NXERM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming ¹³
NX Networked – Wireless	
NXWRM	NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming ¹³
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor ¹³
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 currentlighting.com/litecontrol 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 Enter quantity. 2NL = 2 nightlight circuits/row
- 11 Enter quantity. 2EF = 2 Emergency batteries/row. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible. Provided by others.
- 12 Only applicable when specified with emergency.

NX In-Fixture Control Options:

- 13 Refer to NX Integrated Controls Reference Table for Functionality of Options

CONTROLS OPTIONS AND FUNCTIONALITY

Control Option Ordering Logic & Description		Control Option Functionality										Control Option Components	
		Sensor	Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth® App Programming	Sensor Height		
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	N/A	✓	✓	✓	-	-	✓	✓	Requires NXBTC dongle ¹	-	 NXDSP
	NXERM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-LMI	✓	✓	✓	✓	✓	✓	✓	✓	Max: 12'	  NXDSP
NX Wireless	NXWRM	NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-LMI	✓	✓	✓	✓	✓	✓	✓	✓	Max: 12'	 NXSMP2-LMI
	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor	N/A	✓	✓	✓	-	-	✓	✓	✓	-	 NXRM2-H

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

CONTROLS TECHNICAL SUPPORT

1-800-888-8006 (7:00 am–7:00 pm est)

APP INFORMATION

NX Lighting Controls App



The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.



Android



Apple iOS

NX Connect App



The NX Connect mobile App is a free to use mobile application for programming a NX Connect System. The mobile App allows you to discover, configure and share your NX Connect system.



Apple iOS

CONTROLS OPTIONS AND FUNCTIONALITY (CONTINUED)

SpectraSync™ Color Tuning Technology:

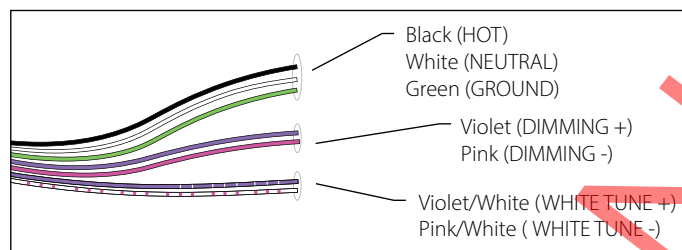
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASync COLOR TUNING TECHNOLOGY		
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.

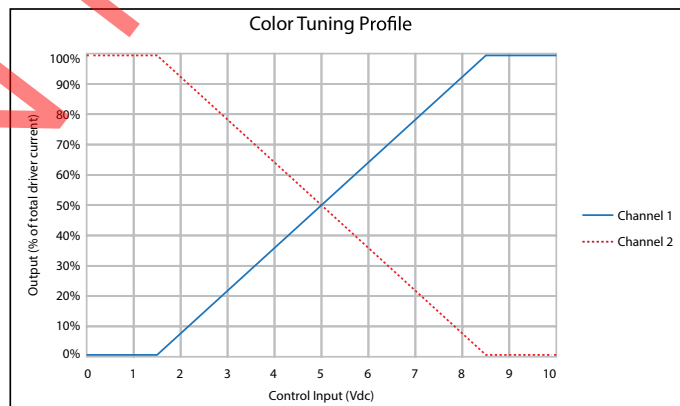


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

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

- Current: NX Lighting Controls Room Controllers (NXRCFX2) and In-fixture Controllers (NXFM2)
- Lutron: DDTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



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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.

Table with 4 columns: Nomenclature, Lumens/ft, W/unit, Efficacy. Rows include models 080, 105, 130, 155, and 187 with their respective lumen and wattage specifications.

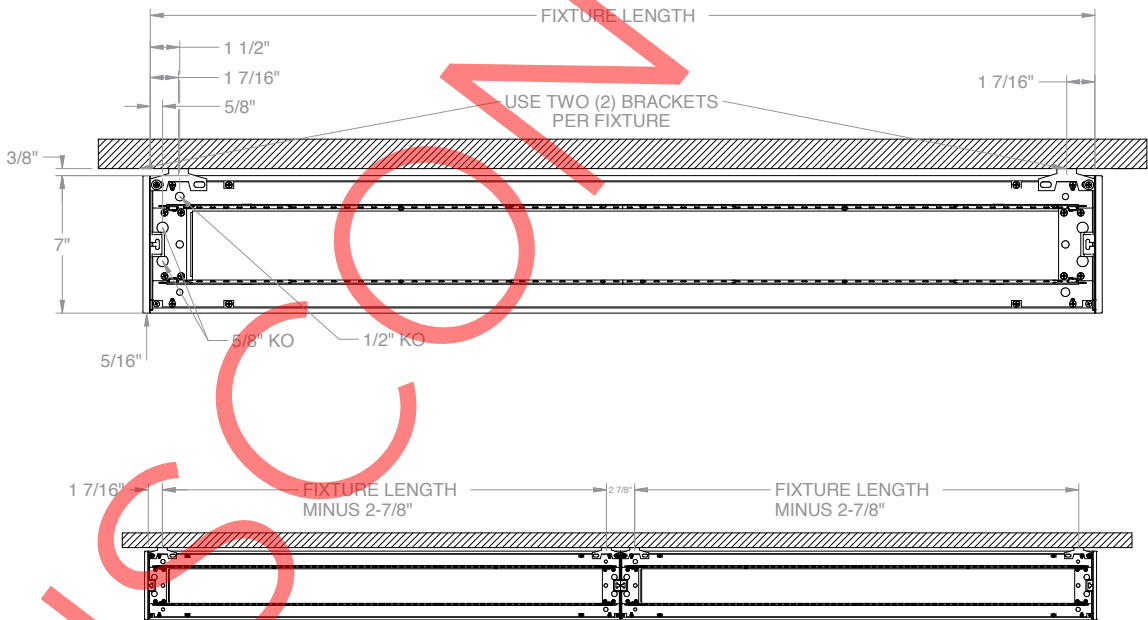
Values are averages of all distributions at 3500K. For each option, see IES files for most accurate performance measures.

Output Multiplier Table

Photometrics for the SAE104-W 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.

Table with 4 columns: Option, 3000K, 3500K, 4000K. Rows include Multiplier values 0.97, 1.00, and 1.01.

DIMENSIONS



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PHOTOMETRY

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

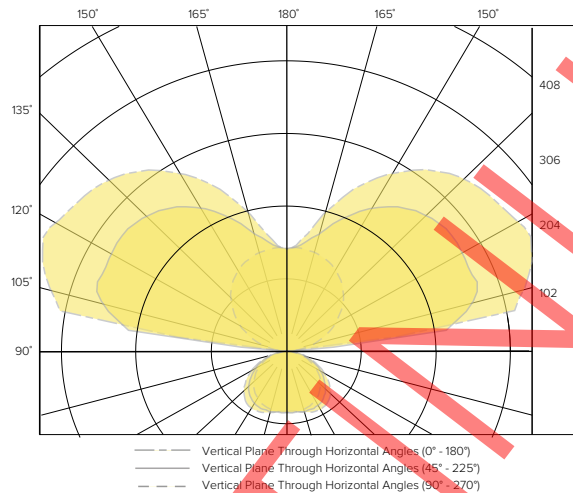
LUMINAIRE DATA

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

ZONAL LUMEN SUMMARY

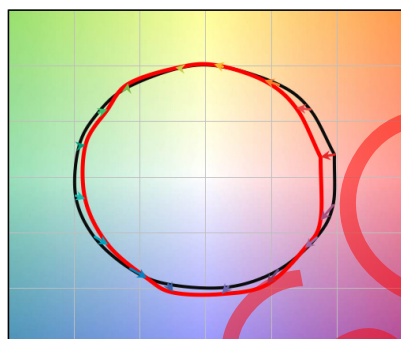
Zone	Lumens	% Luminaire
0-40	401	7.7
0-60	762	14.6
0-90	1003	19.2
0-180	5210	100.0

POLAR GRAPH



TM-30 DATA

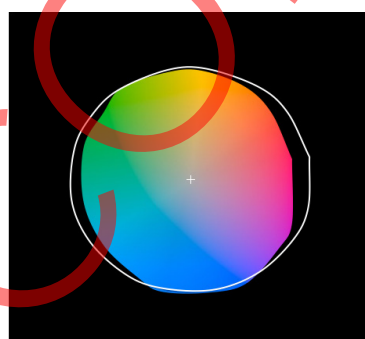
COLOR VECTOR GRAPHIC



*Graphics shown are at 35K

— Reference Illuminant — Test Source

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

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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)