

## DESCRIPTION

The SLES Series is a strip family that incorporates premium performance and construction durability. Designed with our easy-to-use Flip-Up socket design, the SLES significantly reduces installation time. The SLES Series can be installed using various mounting methods and numerous options and accessories are available. In addition to these contractor friendly features, this series is optimized for use with LED based lamps, which are included with each shipment.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Construction

Channel die formed cold rolled steel with numerous KOs for ease of installation. Groove for Tong Hanger. End plate quickly converts to snap-in channel connector for continuous row alignment. Lamp holder bracket flips in place. Channel/wireway cover secured with quarter-turn fasteners.

### Channel/Wireway Cover

Die formed heavy gauge steel. Tight fit for ease of maintenance. Easily removed without use of tools.

### Electrical

LED sources are available in "Type B" which are energized using direct wire to each lamp through specialized sockets or "Type C" through an LED driver matched with UL approved LED lamps. Our electrical systems have been tested and include protection inherent in the drivers for type C and stand alone protection for type B. These systems are cULus listed for damp locations and are rated for 120 - 277V applications.

### Finish

Multistage iron phosphate pretreatment ensures maximum bonding and rust inhibitor. Lighting upgrade, baked white enamel finish. Prepainted material is standard, PAF optional.

### Performance

Through testing and component optimization, the SLES strip line has been optimized to deliver the benefits of LED along with the maintenance benefits traditional fluorescent lamps. These fixtures utilize specialized sockets and electrical protection circuits to ensure safety, durability and electrical code compliance. Performance varies based on lamp selection and type.

### Certifications

cULus 1598 listed for damp locations. Meets FCC part 15 class A requirements. Light Engine performance complies with IESNA LM-79 and LM-80 standards. RoHS compliant. Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements. Can be used for State of California Title 24 high efficacy luminaire.



## SLES

(Socket-Fit Light Engine) Striplight

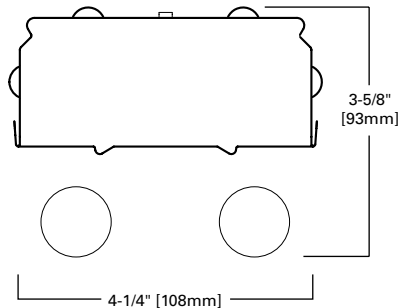
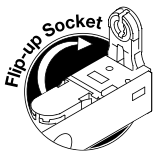
### Non-Dimming:

- SB - Single Ended Type B - with internal protection
- DB - Dual Ended Type B
- DC - Type C - Driver based

### Dimming:

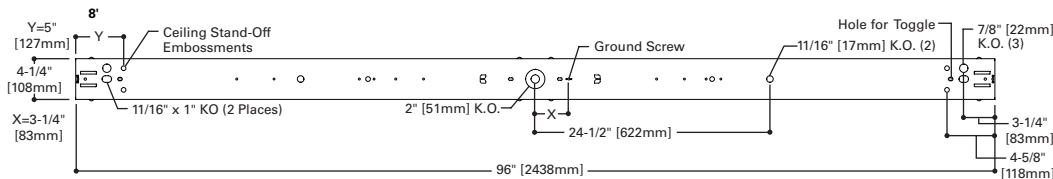
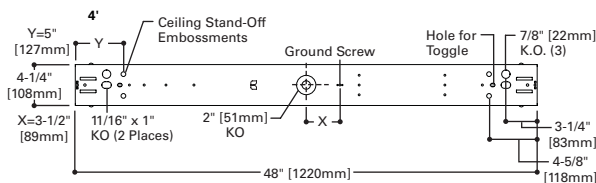
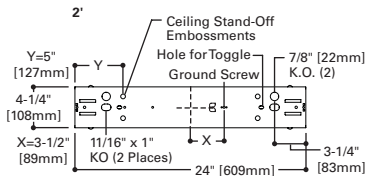
- SBDIM - Type B with 0-10V dimming
- DCDIM - Type C with 0-10V dimming

**2', 4' OR 8' STRIP**  
**1 OR 2 LAMPS**  
**T8 LAMP SHAPE/LENGTH**

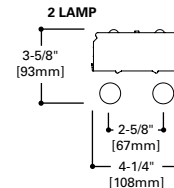
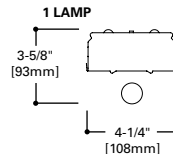


**Note:** Shape of lamp may not be exactly as depicted in line art.

## MOUNTING DATA



## LAMP CONFIGURATIONS



## LOAD DATA

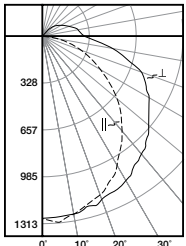
	2'	4'	8'
PF	> .9		
THD%	< 20%		
Low Temp Start	-20° C		
Max Ambient Temp	45° C		
Weight lbs. (based on 2 rows lamps)	4.8	6.6	14.6

## LINEAR DISCONNECT

Safe and convenient means of disconnecting power



PHOTOMETRICS



SLES-2SB18-L835-UNV
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.21 x mounting height, (L) 1.35 x mounting height
Lumens: 4899
Input Watts: 36.7W
Efficacy: 133.5 lm/W
Test Report: SLES-2SB18-L835-UNV.IES

Candlepower table with columns: Angle, Along II, 45°, Across L. Rows 0-90.

Coefficients of Utilization

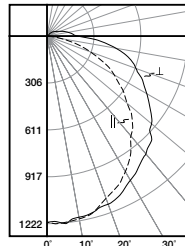
Table of Coefficients of Utilization with columns for effective floor cavity reflectance (80%, 70%, 50%, 30%, 10%, 0%) and RCR values.

Zonal Lumen Summary

Zonal Lumen Summary table with columns: Zone, Lumens, % Fixture. Rows 0-30, 40, 60, 90, 180.

Luminance Data

Luminance Data table with columns: Angle in Deg, Average 0-Deg cd/sm, Average 45-Deg cd/sm, Average 90-Deg cd/sm. Rows 45, 55, 65, 75, 85.



SLES-2SB DIM18-L835-UNV
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.25 x mounting height, (L) 1.33 x mounting height
Lumens: 4251
Input Watts: 34.1W
Efficacy: 124.7 lm/W
Test Report: SSF-SLES-2SB-DIM18-L835-UNV.IES

Candlepower table for SLES-2SB DIM18-L835-UNV with columns: Angle, Along II, 45°, Across L. Rows 0-90.

Coefficients of Utilization

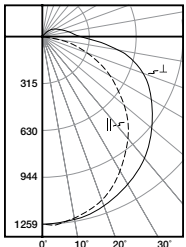
Table of Coefficients of Utilization for SLES-2SB DIM18-L835-UNV with columns for effective floor cavity reflectance and RCR values.

Zonal Lumen Summary

Zonal Lumen Summary table for SLES-2SB DIM18-L835-UNV with columns: Zone, Lumens, % Fixture. Rows 0-30, 45, 55, 65, 75, 85, 180.

Luminance Data

Luminance Data table for SLES-2SB DIM18-L835-UNV with columns: Angle in Deg, Average 0-Deg cd/sm, Average 45-Deg cd/sm, Average 90-Deg cd/sm. Rows 45, 55, 65, 75, 85.



SLES-2DC18-L835-UNV
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.22 x mounting height, (L) 1.36 x mounting height
Lumens: 4730
Input Watts: 34.8W
Efficacy: 135.9 lm/W
Test Report: SLES-2DC18-L835-UNV.IES

Candlepower table for SLES-2DC18-L835-UNV with columns: Angle, Along II, 45°, Across L. Rows 0-90.

Coefficients of Utilization

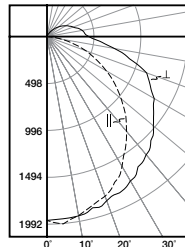
Table of Coefficients of Utilization for SLES-2DC18-L835-UNV with columns for effective floor cavity reflectance and RCR values.

Zonal Lumen Summary

Zonal Lumen Summary table for SLES-2DC18-L835-UNV with columns: Zone, Lumens, % Fixture. Rows 0-30, 40, 60, 90, 180.

Luminance Data

Luminance Data table for SLES-2DC18-L835-UNV with columns: Angle in Deg, Average 0-Deg cd/sm, Average 45-Deg cd/sm, Average 90-Deg cd/sm. Rows 45, 55, 65, 75, 85.



8TSLES-2-SB-15-L835-UNV-U
Dimming Driver
Linear LED 3500K
Spacing criterion: (II) 1.21 x mounting height, (L) 1.35 x mounting height
Lumens: 7446
Input Watts: 60W
Efficacy: 124.1 LPW
Test Report: 8TSLES-2-SB-15-L835-UNV-U.IES

Candlepower table for 8TSLES-2-SB-15-L835-UNV-U with columns: Angle, Along II, 45°, Across L. Rows 0-90.

Coefficients of Utilization

Table of Coefficients of Utilization for 8TSLES-2-SB-15-L835-UNV-U with columns for effective floor cavity reflectance and RCR values.

Zonal Lumen Summary

Zonal Lumen Summary table for 8TSLES-2-SB-15-L835-UNV-U with columns: Zone, Lumens, % Fixture. Rows 0-30, 45, 55, 65, 75, 85, 180.

Luminance Data

Luminance Data table for 8TSLES-2-SB-15-L835-UNV-U with columns: Angle in Deg, Average 0-Deg cd/sm, Average 45-Deg cd/sm, Average 90-Deg cd/sm. Rows 45, 55, 65, 75, 85.

## PERFORMANCE IN FIXTURE - TYPE B

Lamp Rows	Strip Catalog Prefix	Strip Length	Lamp Designations: Type, Watts, CRI, CCT <sup>1</sup>	Nominal Lumens @3500K <sup>2</sup>	Watts	Efficacy	Input Current (A) @120V
Type B Non-Dimming							
1	2SLES-1SB	2'	SB7-L8XX or DB7-L8XX	780	7	111	0.058
	SLES-1SB	4'	SB11-L8XX or DB11-L8XX	1784	11.5	155	0.096
			SB12-L8XX	1834	12.5	147	0.104
			SB15-L8XX or DB15-L8XX	1883	15	126	0.125
			SB18-L8XX	2478	18.5	134	0.154
	8TSLES-1SB	8'	SB11-L8XX or DB11-L8XX	3568	23	155	0.192
			SB12-L8XX	3667	25	147	0.208
			SB15-L8XX or DB15-L8XX	3767	30	126	0.250
			SB18-L8XX	4956	37	134	0.308
	2	2SLES-1SB	2'	SB7-L8XX or DB7-L8XX	1482	14	106
SLES-1SB		4'	SB11-L8XX or DB11-L8XX	3527	23	153	0.192
			SB12-L8XX	3625	25	145	0.208
			SB15-L8XX or DB15-L8XX	3723	30	124	0.250
			SB18-L8XX	4899	37	132	0.308
8TSLES-1SB		8'	SB11-L8XX or DB11-L8XX	7055	46	153	0.383
			SB12-L8XX	7251	50	145	0.417
			SB15-L8XX or DB15-L8XX	7446	60	124	0.500
			SB18-L8XX	9798	74	132	0.617
Type B Dimming							
1	SLES-1SB	4'	SBDIM18-8XX	2160	17.5	123	0.146
	8TSLES-1SB	8'		4320	35	123	0.292
2	SLES-2SB	4'		4251	35	121	0.292
	8TSLES-2SB	8'		8502	70	121	0.583

Notes: <sup>1</sup> Lamps available in 3000K, 3500K, 4000K, and 5000K. Designate in catalog number when ordering. <sup>2</sup> Performance data at 25°C and may change depending upon lamps used. Use IES files for confirmation prior to install.

## PERFORMANCE IN FIXTURE - TYPE C

Lamp Rows	Strip Catalog Prefix	Strip Length	Lamp Designations: Type, Watts, CRI, CCT <sup>1</sup>	Nominal Lumens @3500K <sup>2</sup>	Watts	Efficacy	Input Current (A) @120V
Type C Non-Dimming							
1	2SLES-1DC	2'	DC7-L8XX	845	7	121	0.058
	SLES-1DC	4'	DC13-L8XX	1478	12	123	0.100
			DC16-L8XX	1971	15	131	0.125
	8TSLES-1DC	8'	DC13-L8XX	2956	24	123	0.200
DC16-L8XX			3942	30	131	0.250	
2	2SLES-1DC	2'	DC7-L8XX	1665	14	119	0.117
	SLES-1DC	4'	DC13-L8XX	2956	24	123	0.200
			DC16-L8XX	3942	30	131	0.250
	8TSLES-1DC	8'	DC13-L8XX	5913	48	123	0.400
			DC16-L8XX	7883	60	131	0.500
Type C Dimming							
1	SLES-1DC	4'	DCDIM13-L8XX	1971	14	141	0.117
			DCDIM16-L8XX	2266	16.5	137	0.138
	8TSLES-1DC	8'	DCDIM13-L8XX	3942	28	141	0.233
			DCDIM16-L8XX	4533	33	137	0.275
2	SLES-2DC	4'	DCDIM13-L8XX	3942	28	141	0.233
			DCDIM16-L8XX	4533	33	137	0.275
	8TSLES-2DC	8'	DCDIM13-L8XX	7883	56	141	0.467
			DCDIM16-L8XX	9066	66	137	0.550

Notes: <sup>1</sup> Lamps available in 3000K, 3500K, 4000K, and 5000K. Designate in catalog number when ordering. <sup>2</sup> Performance data at 25°C and may change depending upon lamps used. Use IES files for confirmation prior to install.

**ORDERING INFORMATION TYPE B LAMPS**

TYPE B SAMPLE STRIP NUMBER: 8TSLES-2DC-PI2BLK-WG-6PP-IEM1-U

<p>2=2' Length [Blank]=4' Length 8T=8' Length</p> <p>Series SLES=Socket-fit Light Engine Striplight</p>	<p>Number of Lamp Rows <sup>(1)</sup> 1=1 Row (lamps included, 1 for 4', 2 for 8') 2=2 Rows (lamps included, 2 for 4', 4 for 8')</p> <p>Lamp Wiring Type Type B: SB=Single Ended Non-Dimming SBDIM=Single Ended Dimming DB=Dual Ended</p>	<p>Voltage [Blank]=Universal Voltage 120-277 120=120V 277=277V</p> <p>Options GL=Single Element Fuse GM=Double Element Fuse GTR2=Bodine Generator Transfer Relay for dimming <sup>(4)</sup> GTR=Bodine Generator Transfer Relay for non-dimming <sup>(4)</sup> ETRD=Emergency Transfer Relay with dimming control <sup>(4)</sup></p>	<p>Options 6-3/18 SJT-C&amp;P-515P=Cord &amp; Plug (120V) (15 AMP) 6-3/18 SJT-C&amp;P-L715P=Cord &amp; Plug (277V) (15 AMP) PI1BLK-WG-6PP=Single circuit with ground, round plug-in wiring harness. Black, white and green wires <sup>(6),(7)</sup> PI2BLK-WG-6PP=Two circuit with ground, round plug-in wiring harness. Black, white, blue and green wires <sup>(6)</sup> PI10V=Two pole dimming harness with purple and gray dimming control wires IEM1=Inverter Emergency with 1 lamp wired in emergency IEM2=Inverter Emergency with 2 lamps wired in emergency</p>	<p>Packaging U=Unit Pack 4B=4 Bulk Packing</p>
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Lamp Options (lamps to be invoiced on a separate line)  
TYPE B SAMPLE LAMP OPTIONS NUMBER: SBDIM18-L840 (Dimming Type B, 18 Watts, 80 CRI, 4000K)

<p>Type SB=Single Ended Type B Non-dimming DB=Dual Ended Type B Non-dimming</p> <p>Dimming SBDIM=Type B with 0-10V dimming</p>	<p>Rated Watts and approx. lumens per lamp</p> <table border="1"> <tr> <th>2' Lamps</th> <th>4' Lamps</th> </tr> <tr> <td>7=800 (type B)</td> <td>Type B</td> </tr> <tr> <td></td> <td>11=1400</td> </tr> <tr> <td></td> <td>12=1500</td> </tr> <tr> <td></td> <td>15=1800</td> </tr> <tr> <td></td> <td>18=2200</td> </tr> </table>	2' Lamps	4' Lamps	7=800 (type B)	Type B		11=1400		12=1500		15=1800		18=2200	<p>Lamp CRI and CCT</p> <p>L830=80 CRI, 3000K L835=80 CRI, 3500K L840=80 CRI, 4000K L850=80 CRI, 5000K L865=80 CRI, 6500K <sup>(5)</sup></p>
2' Lamps	4' Lamps													
7=800 (type B)	Type B													
	11=1400													
	12=1500													
	15=1800													
	18=2200													

NOTES: <sup>(2)</sup> Lamps are supplied by Eaton and must be shipped according to Eaton standards and test requirements. Lamps will be bulk packed based on order requirements and may have minimum order quantities. <sup>(4)</sup> Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR requires 2 relays on fixtures with dimming. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices. <sup>(5)</sup> Available in SB15 only. <sup>(6)</sup> Must use 2 wire harness when used with emergency options. <sup>(7)</sup> Only use for non-EM installations.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

**ORDERING INFORMATION TYPE C LAMPS**

TYPE C SAMPLE STRIP NUMBER: 8TSLES-2DC-PI2BLK-WG-6PP-IEM1-U

<p>2=2' Length [Blank]=4' Length 8T=8' Length</p> <p>Series SLES=Socket-fit Light Engine Striplight</p>	<p>Number of Lamp Rows <sup>(2)</sup> 1=1 Row (lamps included, 1 for 4', 2 for 8') 2=2 Rows (lamps included, 2 for 4', 4 for 8')</p> <p>Lamp Wiring Type Type C: DC=Driver based wiring for dimming and non-dimming</p>	<p>Voltage [Blank]=Universal Voltage 120-277 120=120V 277=277V</p> <p>Options GL=Single Element Fuse GM=Double Element Fuse EL8=Emergency Installed <sup>(1)</sup> GTR2=Bodine Generator Transfer Relay for dimming <sup>(4)</sup> GTR=Bodine Generator Transfer Relay for non-dimming <sup>(4)</sup> ETRD=lota Emergency Transfer Relay with dimming control <sup>(4)</sup></p>	<p>Drivers (only for type C) [Blank]=1 Driver 2=2 Drivers <sup>(3)</sup></p>	<p>Options 6-3/18 SJT-C&amp;P-515P=Cord &amp; Plug (120V) (15 AMP) 6-3/18 SJT-C&amp;P-L715P=Cord &amp; Plug (277V) (15 AMP) PI1BLK-WG-6PP=Single circuit with ground, round plug-in wiring harness. Black, white and green wires <sup>(6),(7)</sup> PI2BLK-WG-6PP=Two circuit with ground, round plug-in wiring harness. Black, white, blue and green wires <sup>(6)</sup> PI10V=Two pole dimming harness with purple and gray dimming control wires IEM1=Inverter Emergency with 1 lamp wired in emergency IEM2=Inverter Emergency with 2 lamps wired in emergency</p>	<p>Packaging U=Unit Pack 4B=4 Bulk Packing</p>
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Lamp Options (lamps to be invoiced on a separate line)  
TYPE C SAMPLE LAMP OPTIONS NUMBER: DCDIM16-L840 (Dimming Type C, 18 Watts, 80 CRI, 4000K)

<p>Type DC=Type C Driver Based Non-dimming</p> <p>Dimming DCDIM=Type C with 0-10V dimming</p>	<p>Rated Watts and approx. lumens per lamp</p> <table border="1"> <tr> <th>2' Lamps</th> <th>4' Lamps</th> </tr> <tr> <td>7=850 (type C)</td> <td>Type C</td> </tr> <tr> <td></td> <td>13=1700</td> </tr> <tr> <td></td> <td>16=2100</td> </tr> </table>	2' Lamps	4' Lamps	7=850 (type C)	Type C		13=1700		16=2100	<p>Lamp CRI and CCT</p> <p>L830=80 CRI, 3000K L835=80 CRI, 3500K L840=80 CRI, 4000K L850=80 CRI, 5000K</p>
2' Lamps	4' Lamps									
7=850 (type C)	Type C									
	13=1700									
	16=2100									

NOTES: <sup>(1)</sup> Emergency options converter based with type C systems using internally installed battery LED driver and matched LED lamps. <sup>(2)</sup> Lamps are supplied by Eaton and must be shipped according to Eaton standards and test requirements. Lamps will be bulk packed based on order requirements and may have minimum order quantities. <sup>(3)</sup> 2 drivers is only available with 2 row options or 8' single row options. Ex. 2 drivers for 8TSLES will be wired to control each row. <sup>(4)</sup> Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR requires 2 relays on fixtures with dimming. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

**SHIPPING DATA**

Catalog No.	Wt.
2SLES	4.0 lbs.
SLES	5.1 lbs.
8TSLES	10.2 lbs.



Eaton  
1121 Highway 74 South  
Peachtree City, GA 30269  
P: 770-486-4800  
www.eaton.com/lighting

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