



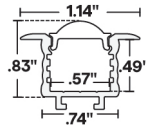
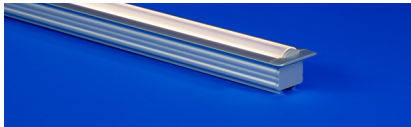
# ESSENTIALS EMBD-OPTICS (02)

## SW-HE

### 24VDC Linear Fixtures - Recessed



410.2 & 410.16  
Closet Rated  
up to 4.0W/ft



- Recessed flanged fixture designed for dryall and millwork installations
- Choose from 12°, 14°, 20°, 30°, 45° or 60° beam angles
- Mounting options include magnet or spring mounting clips
- Features painted end caps to match extrusion finish
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations
- Can be suitable for exterior use when specified as wet, contact factory for more information

#### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
				STD	

#### ADDITIONAL INFORMATION REQUIRED TO ORDER

7	8	9	10	11	12	13	14	15
WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL

Sample Part Number: **EB2SW-3.0HE-30-DRY-STD-20-P1-BW-BW-BK-CL2-SP-ST-48"-E**

1	PRODUCT	2	WATTS/FT	3	CCT	4	RATED	5	EFFICIENCY	6	LENS
	<b>EB2SW</b> <b>EB2SW-USA</b>  Select USA option for BAA and BABA projects. SW-HE only. Only DRY ratings apply.  See following pages for compatible power supplies.		<b>1.5HE</b> 1.5W/ft HE <b>3.0HE</b> 3.0W/ft HE <b>6.0HE</b> 6.0W/ft HE  <b>3.0HE+</b> 3.0W/ft HE+ <b>6.0HE+</b> 6.0W/ft HE+  <b>1.5HE</b> 1.5W/ft HE <b>3.0HE</b> 3.0W/ft HE <b>6.0HE</b> 6.0W/ft HE  <b>3.0HE+</b> 3.0W/ft HE+		<b>20</b> 2000K <b>22</b> 2200K <b>24</b> 2400K <b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K  <b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K  <b>24</b> 2400K <b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K  <b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K		<b>DRY</b> IP20          <b>DMP</b> IP54          <b>WET</b> IP67  Can be suitable for exterior use, contact factory for more information		<b>STD</b> Standard	<b>12</b> Optical 12° <b>14</b> Optical 14° <b>20</b> Optical 20° <b>30</b> Optical 30° DRY or DMP only <b>45</b> Optical 45° DRY or DMP only <b>60</b> Optical 60° DRY or DMP only  For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages	
7	WIRE INPUT/OUTPUT	8	CONNECTOR/WIRE IN	9	CONNECTOR/WIRE OUT	10	WIRE COLOR				
	<b>SINGLE (Input only)</b> <b>S1</b> End Feed <b>S2</b> Bottom Feed  <b>PASS THROUGH (Input/output)</b> <b>P1</b> End Feed <b>P2</b> Bottom Feed		<b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"		<b>CLS</b> Closed End (No feed)      <b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>WH</b> White <b>BK</b> Black <b>N/A</b> For Barrel  wet barrel only available in black					
	For continuous mounting, consider bottom feed.		BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)		BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)						
11	WIRE TYPE	12	MOUNTING	13	FINISH	14	LENGTH (IN)	15	EXACT/OPTIMAL		
	<b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated <b>N/A</b> For Barrel  CL2P only available with bare wire leads (BW)	<b>SP</b> Spring Clip <b>MG</b> Magnet		<b>ST</b> Satin <b>CU</b> Custom  Custom finishes require a longer lead time, consult factory		Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".	<b>O</b> Optimal Illumination <b>E</b> Exact Specified Length  Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts.				

For continuous mounting, consider bottom feed.

BW: Standard length is 24". Max length is 120".  
Request custom length by writing in part number next to BW (example: BW48)

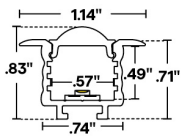
BW: Standard length is 24". Max length is 120".  
Request custom length by writing in part number next to BW (example: BW48)



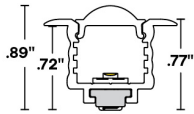
# ESSENTIALS EMBD-OPTICS (02) SW-HE

24VDC Linear Fixtures - Recessed

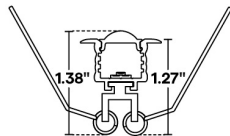
## 1 PRODUCT - DIMENSIONS



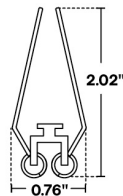
Profile with optical lens



Profile with optical lens and magnet mounting clip



Profile with optical lens and spring mounting clip



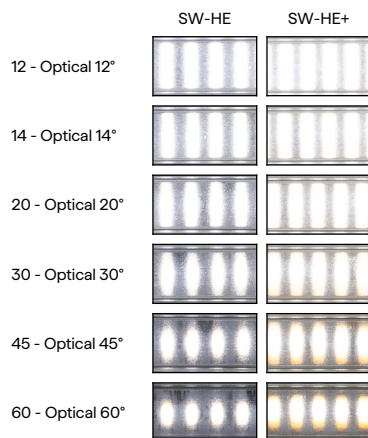
Spring mounting clip

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs, L70 = 50000 for HE+]  
Tested with EB2SW-\*\*-30-DRY-STD

	1.5HE W/FT		3.0HE W/FT		3.0HE+ W/FT		6.0HE W/FT		6.0HE+ W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
12	163	98	299	98	412	92	566	98	761	92
14	174	98	320	98	461	92	606	98	853	92
20	185	98	339	98	483	92	642	98	892	92
30	189	98	346	98	499	92	656	98	923	92
45	213	98	390	98	547	92	738	98	1011	92
60	210	98	384	98	545	92	728	98	1006	92

## 6 DIODE VISIBILITY



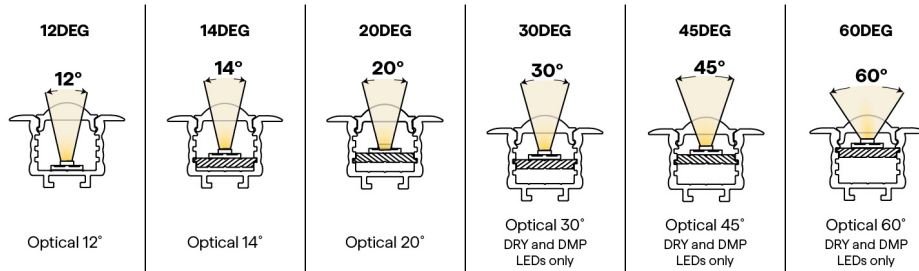


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24VDC Linear Fixtures - Recessed

## PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

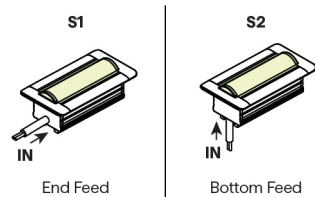


## TEMPERATURE RATINGS

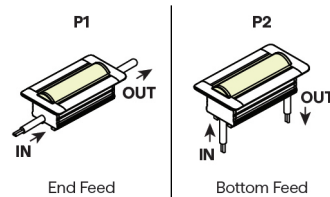
		1.5 HE W/FT		3.0 HE W/FT		3.0 HE+ W/FT		6.0 HE W/FT		6.0 HE+ W/FT	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Recessed	-4°F	140°F	-4°F	135°F	-13°F	135°F	-4°F	110°F	-13°F	110°F
DMP	Ambient Operating Temp - Recessed	-4°F	135°F	-4°F	130°F	**	**	-4°F	105°F	**	**
WET	Ambient Operating Temp - Recessed	-4°F	135°F	-4°F	130°F	-13°F	130°F	-4°F	105°F	**	**

## 7 WIRE INPUT/OUTPUT

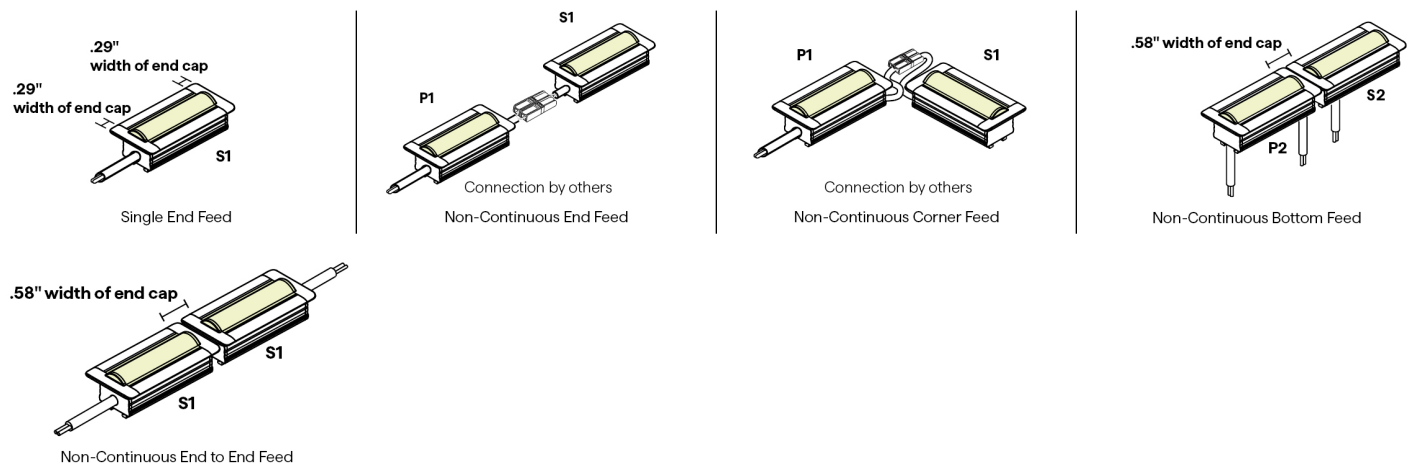
SINGLE (Input only)



PASS THROUGH (Input/Output)



## CONFIGURATION OPTIONS



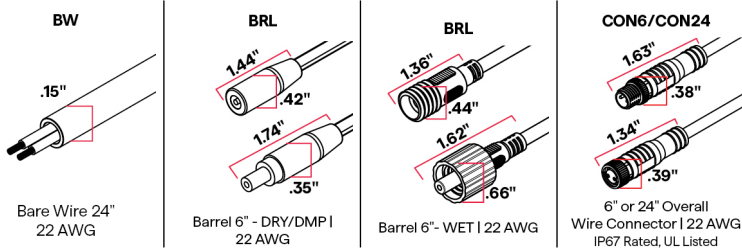


# ESSENTIALS EMBD-OPTICS (02) SW-HE

24VDC Linear Fixtures - Recessed

## 8 / 9 CONNECTOR/WIRE - IN/OUT

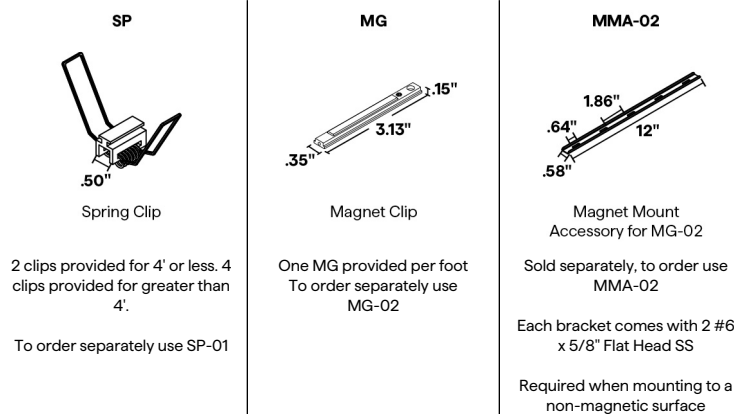
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



## 10 WIRE COLOR



## 12 MOUNTING



## 13 FINISH



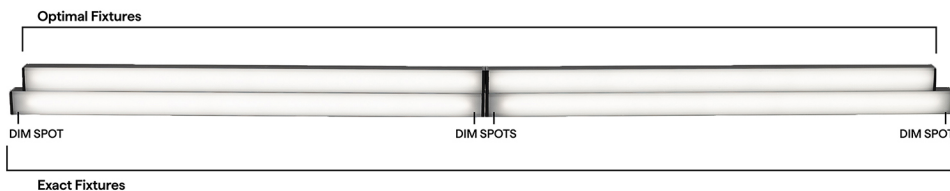
Custom finishes require a longer lead time, consult factory

## 14 EXACT/OPTIMAL FIXTURE LENGTH

[E/O Length Calculator →](#)

[E/O Explained →](#)

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.





# ESSENTIALS EMBD-OPTICS (02) SW-HE

24VDC Linear Fixtures - Recessed

## SW-HE, SW-HE+ DRY DMP LENGTHS BY INCH

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture 
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
	 S1 End Feed	 S2 Bottom Feed	 P1 End Feed	 P2 Bottom Feed
12"	10.41"		10.66"	
13"	12.41"		12.66"	
14"	12.41"		12.66"	
15"	14.41"		14.66"	
16"	14.41"		14.66"	
17"	16.41"		16.66"	
18"	16.41"		16.66"	
19"	18.41"		18.66"	
20"	18.41"		18.66"	
21"	20.41"		20.66"	
22"	20.41"		20.66"	
23"	22.41"		22.66"	
24"	22.41"		22.66"	
36"	34.41"		34.66"	
48"	46.41"		46.66"	
60"	58.41"		58.66"	
72"	70.41"		70.66"	
84"	82.41"		82.66"	
96"	94.41"		94.66"	

## SW-HE+ WET LENGTHS BY INCH

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture 
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
	 S1 End Feed	 S2 Bottom Feed	 P1 End Feed	 P2 Bottom Feed
12"	10.61"		10.76"	
13"	12.61"		12.76"	
14"	12.61"		12.76"	
15"	14.61"		14.76"	
16"	14.61"		14.76"	
17"	16.61"		16.76"	
18"	16.61"		16.76"	
19"	18.61"		18.76"	
20"	18.61"		18.76"	
21"	20.61"		20.76"	
22"	20.61"		20.76"	
23"	22.61"		22.76"	
24"	22.61"		22.76"	
36"	34.61"		34.76"	
48"	46.61"		46.76"	
60"	58.61"		58.76"	
72"	70.61"		70.76"	
84"	82.61"		82.76"	
96"	94.61"		94.76"	



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## COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	SW24/5.0, SW-HE, SW-HE+	SW24/5.0, SW-HE, SW-HE+
Dim to Black	Q6M-DC+CAP QTM-DC+CAP iQ-PH+QD1	QOM-DC+CAP QOM-PH
0.1%	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-DMX Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QOM-eLED+DALI-DT6 QOM-eLED+PS-DALI-DT6 QZ-DMX QZ-PH/0-10V
1%	QTM-eLED(E) QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QZ-DALI-DT6
10%	Non-Dim Power Supply with SW App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	SW24/5.0, SW-HE, SW-HE+	SW24/5.0, SW-HE, SW-HE+
Non-Dim	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND	Q-SET-QZ-ND Q-SET-eLED-ND QOM-eLED-ND QZ-ND
Phase	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH+QD1	Q-SET-QZ-PH/0-10V QOM-DC+CAP QOM-PH QZ-PH/0-10V
0-10V	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QZ-PH/0-10V
Lutron Athena	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN	
ECO System	QTM-eLED(E)	
DMX	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QOM-eLED+DALI-DT6 QZ-DALI-DT6
SCENE App Dimmed	Non-Dim Power Supply with SW App Dongle	



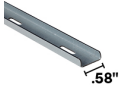
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### COMPATIBLE MOUNTING ACCESSORIES

MMA-02



Magnet Mount Accessory  
of MG-02