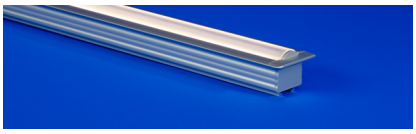
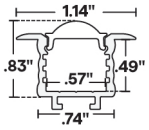
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

24VDC Linear Fixtures - Recessed

410.2 & 410.16 Closet Rated in 1.5HE





- Recessed fixture designed for dryall and millwork installations
- Optical lens options produce beam angles of 12°, 14°, 20°, 30°, 45° or 60°
- Mounting options include spring or magnet 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
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled

1 PRODUCT	2 WATTS/ FT	3 CCT	4 RATED	5 EFFICIENCY	6 LENS	7 WIRE INPUT/ OUTPUT	8 CONNECTOR/ WIRE IN	9 CONNECTOR/ WIRE OUT	10 WIRE COLOR	11 WIRE TYPE	12 MOUNTING	13 FINISH	14 LENGTH (IN)	15 EXACT/ OPTIMAL
				STD										

Sample Part Number: **EB2DW-2.5HE-20/30-DRY-STD-20-P1-BW-BW-BK-CL2-SP-ST-48"-E**

1 PRODUCT

EB2DW
EB2DW-USA

Select USA option for BAA and BABA projects.

LED engine is built with 3 wires requiring 0-10V, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See following pages for compatible power supplies.

2 WATTS/FT

1.5HE	1.5W/ft HE
2.5HE	2.5W/ft HE

1.5HE	1.5W/ft HE
2.5HE	2.5W/ft HE

3 CCT

20/27	2000K/2700K
20/30	2000K/3000K
27/40	2700K/4000K
27/55	2700K/5500K

24/30	2400K/3000K
27/40	2700K/4000K

4 RATED

DRY	IP20
WET	IP67

Can be suitable for exterior use, contact factory for more information

DMP	IP54

5 EFFICIENCY

STD	Standard

6 LENS

12	Optical 12°
14	Optical 14°
20	Optical 20°
30	Optical 30° DRY or DMP only
45	Optical 45° DRY or DMP only
60	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

S1	Single 1 (Input only) - End Feed
S2	Single 2 (Input only) - Bottom Feed

P1	Pass Through 1 (Input/output) - End Feed
P2	Pass Through 2 (Input/output) - Bottom Feed

For continuous mounting, consider bottom feed.

8 CONNECTOR/WIRE IN

BW	Bare Wire (Standard 24")
CON6	Connector 6"
CON24	Connector 24"

BW	Bare Wire (Standard 24")
CON6	Connector 6"
CON24	Connector 24"

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

9 CONNECTOR/WIRE OUT

CLS	Closed End (No feed)

BW	Bare Wire (Standard 24")
CON6	Connector 6"
CON24	Connector 24"

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

10 WIRE COLOR

WH	White
BK	Black

11 WIRE TYPE

CL2	Class 2
CL2P	Plenum Rated

CL2P only available with bare wire leads (BW)

12 MOUNTING

SP	Spring Clip
MG	Magnet

13 FINISH

ST	Satin
CU	Custom

Custom finishes require a longer lead time, consult factory

14 LENGTH (IN)

Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".

15 EXACT/OPTIMAL

O	Optimal Illumination
E	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.

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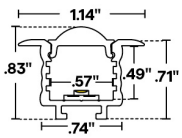
Specification subject to change. Rev-01-13-26

5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance

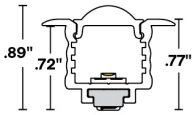
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

24VDC Linear Fixtures - Recessed

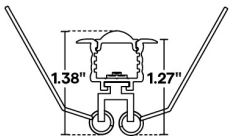
1 PRODUCT - DIMENSIONS



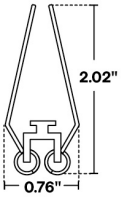
Profile with optical lens



Profile with optical lens and magnet mounting clip



Profile with optical lens and spring mounting clip



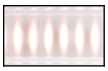
Spring mounting clip

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with EB2DW-**-30-DRY-STD

	1.5HE W/FT		2.5HEW/FT	
	3000K		3000K	
	LM/FT	CRI	LM/FT	CRI
12	125	98	197	98
14	140	98	221	98
20	146	98	231	98
30	151	98	239	98
45	166	98	262	98
60	165	98	261	98

6 DIODE VISIBILITY

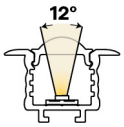


Optical lens

PHOTOMETRIC PERFORMANCE

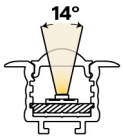
Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

12DEG



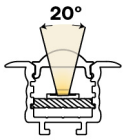
Optical 12°

14DEG



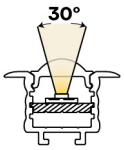
Optical 14°

20DEG



Optical 20°

30DEG

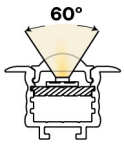


Optical 30°
DRY and DMP LEDs only

45DEG

Optical 45°
DRY and DMP LEDs only

60DEG



Optical 60°
DRY and DMP LEDs only

TEMPERATURE RATINGS

		DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
		Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Recessed	-4°F	140°F	-4°F	125°F	-4°F	130°F	-4°F	110°F
DMP	Ambient Operating Temp - Recessed	-4°F	135°F	-4°F	120°F	-4°F	125°F	-4°F	105°F
WET	Ambient Operating Temp - Recessed	-4°F	135°F	-4°F	120°F	-4°F	125°F	-4°F	105°F

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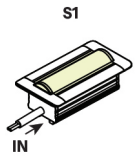
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

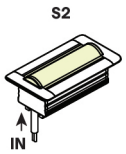
24VDC Linear Fixtures - Recessed

7 WIRE INPUT/OUTPUT

SINGLE (Input only)

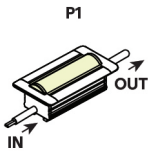


End Feed

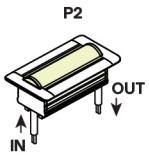


Bottom Feed

PASS THROUGH (Input/Output)

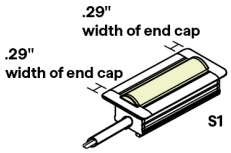


End Feed

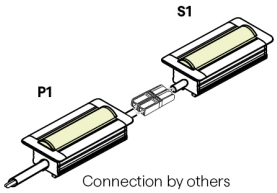


Bottom Feed

CONFIGURATION OPTIONS

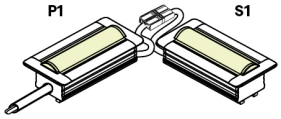


Single End Feed



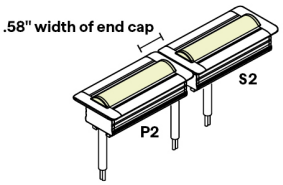
Connection by others

Non-Continuous End Feed

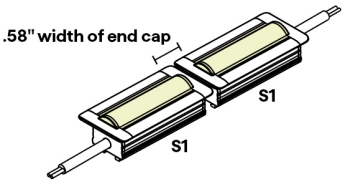


Connection by others

Non-Continuous Corner Feed



Non-Continuous Bottom Feed

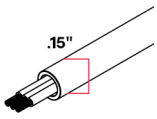


Non-Continuous End to End Feed

8 / 9 CONNECTOR/WIRE – IN/OUT

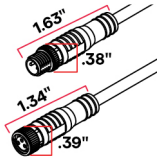
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out

BW



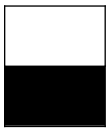
Bare Wire 24"
22 AWG

CON6/CON24



6" or 24" Overall
Wire Connector | 22 AWG
IP67 Rated, UL Listed

10 WIRE COLOR



White

Black

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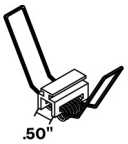
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

24VDC Linear Fixtures - Recessed

12 MOUNTING

SP



Spring Clip

2 clips provided for 4' or less. 4 clips provided for greater than 4'.

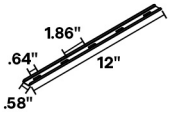
To order separately use SP-01

MG

Magnet Clip

One MG provided per foot
To order separately use MG-02

MMA-02



Magnet Mount
Accessory for MG-02

Sold separately, to order use MMA-02

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

13 FINISH

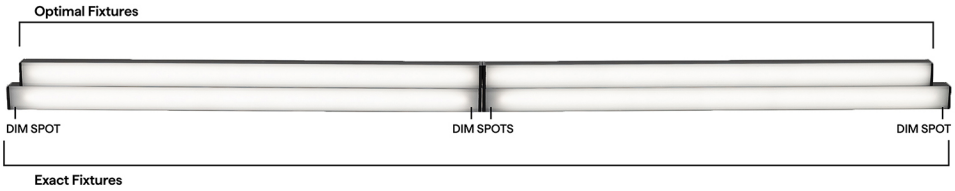
Satin

Custom finishes require a longer lead time, consult factory

14 EXACT/OPTIMAL FIXTURE LENGTH

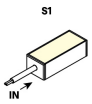
E/O Length Calculator → E/O Explained →

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.

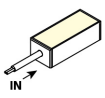
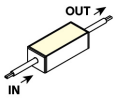


DW-HE DRY DMP LENGTHS BY INCH

EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	 End Feed
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	
	 End Feed	Bottom Feed	 End Feed	Bottom Feed
12"	10.51"		10.86"	
13"	12.51"		12.86"	
14"	12.51"		12.86"	
15"	14.51"		14.86"	
16"	14.51"		14.86"	
17"	16.51"		16.86"	
18"	16.51"		16.86"	
19"	18.51"		18.86"	
20"	18.51"		18.86"	
21"	20.51"		20.86"	
22"	20.51"		20.86"	
23"	22.51"		22.86"	
24"	22.51"		22.86"	
36"	34.51"		34.86"	
48"	46.51"		46.86"	
60"	58.51"		58.86"	
72"	70.51"		70.86"	
84"	82.51"		82.86"	
96"	94.51"		94.86"	

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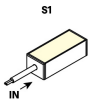
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

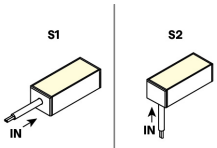
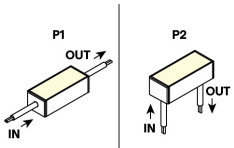
24VDC Linear Fixtures - Recessed

DW-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 
12"	10.66"	11.06"
13"	12.66"	11.06"
14"	12.66"	13.06"
15"	14.66"	13.06"
16"	14.66"	15.06"
17"	16.66"	15.06"
18"	16.66"	17.06"
19"	18.66"	17.06"
20"	18.66"	19.06"
21"	20.66"	19.06"
22"	20.66"	21.06"
23"	22.66"	21.06"
24"	22.66"	23.06"
36"	34.66"	35.06"
48"	46.66"	47.06"
60"	58.66"	59.06"
72"	70.66"	71.06"
84"	82.66"	83.06"
96"	94.66"	95.06"

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
	DW-HE Tunable Applications	DW-HE Tunable Applications
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DALI-DT6 QOM-eLED+DALI-DT8 QOM-eLED+PS-DALI-DT6 QOM-eLED+PS-DALI-DT8 QOM-eLED+TW QZ-DMX
1%	QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle	

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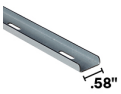
ESSENTIALS EMBD-OPTICS (02) TUNABLE APPLICATIONS

24VDC Linear Fixtures - Recessed

DIMMING PROTOCOL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	**DW-HE Tunable Applications**
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN	QOM-eLED+TW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN	
DMX LED wattage must be doubled for DW-HE products	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QOM-eLED+DALI-DT6
DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8 QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle	

COMPATIBLE MOUNTING ACCESSORIES

MMA-02



Magnet Mount Accessory of MG-02

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