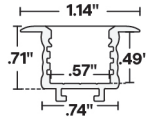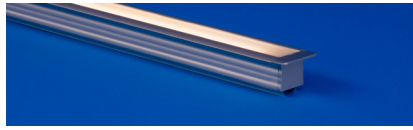# ESSENTIALS EMBD-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Recessed

- Recessed flanged fixture designed for drywall and millwork installations
- Features high quality LED strips encapsulated in polyurethane in a rigid extrusion providing a robust fixture
- Encapsulation available in clear or translucent
- Suitable for indoor and outdoor locations (IK10)
- Mounting options include spring or magnet mounting clips
- Features painted end caps to match extrusion finish or clear end caps to achieve seamless appearance of long runs
- 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
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled

Dimensions: 1.14", .71", .49", .57", .74"

INFORMATION REQUIRED FOR LIGHTING SCHEDULE

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

ADDITIONAL INFORMATION REQUIRED TO ORDER

⑦ WIRE INPUT/OUTPUT	⑧ CONNECTOR / WIRE IN	⑨ CONNECTOR / WIRE OUT	⑩ INPUT END CAP	⑪ OUTPUT END CAP	⑫ WIRE COLOR	⑬ WIRE TYPE	⑭ MOUNTING	⑮ FINISH	⑯ LENGTH (IN)	⑰ EXACT/ OPTIMAL
			STD	STD						

Sample Part Number: **EB3DW-3.0-24/30-ENC-STD-TL-P1-BW-BW-STD-STD-BK-CL2-SP-ST-48"-E**

① PRODUCT

EB3DW
EB3DW-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

③ CCT

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

④ RATED

ENC	IP67

⑤ EFFICIENCY

STD	Standard

⑥ LENS

CL	Clear
TL	Translucent

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

SINGLE (Input only)

S1	End Feed
S2	Bottom Feed

For continuous mounting, consider bottom feed

PASS THROUGH (Input/output)

P1	End Feed
P2	Bottom Feed

For continuous mounting, consider bottom feed

⑧ CONNECTOR/WIRE IN

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)

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 INPUT END CAP

STD	Standard

STD - End cap matches fixture finish chosen

⑪ OUTPUT END CAP

STD	Standard

STD - End cap matches fixture finish chosen

⑫ WIRE COLOR

WH	White
BK	Black

⑬ WIRE TYPE

CL2	Class 2
CL2P	Plenum Rated

CL2P only available with bare wire leads (BW)

⑭ MOUNTING

SP	Spring Clip
MG	Magnet

⑮ FINISH

ST	Satin
CU	Custom

Custom finishes require a longer lead time, consult factory

⑯ LENGTH (IN)

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

⑰ 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.
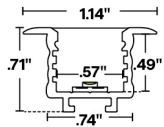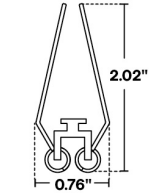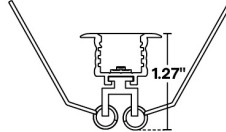
1 PRODUCT - DIMENSIONS

Profile
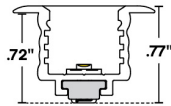
Profile with magnet mounting clip

Spring mounting clip

Profile with spring mounting clip

2 DELIVERED LUMENS

[Calculated L70 = 40000 hrs]
Tested with EB3DW-**-30-ENC-STD

	1.5HE W/FT		2.5HE W/FT	
	3000K		3000K	
	LM/FT	CRI	LM/FT	CRI
CL	87	98	137	98
TL	69	98	110	98

6 DIODE VISIBILITY

ENC/CL - Clear encapsulation
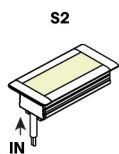
ENC/TL - Translucent encapsulation

TEMPERATURE RATINGS

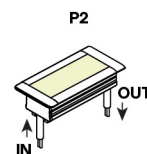|	DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT	
	QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
	Min	Max	Min	Max	Min	Max	Min	Max
Ambient Operating Temp - Recessed	-4°F	130°F	-4°F	110°F	-4°F	120°F	-4°F	95°F

7 WIRE INPUT/OUTPUT
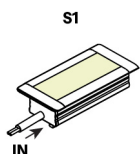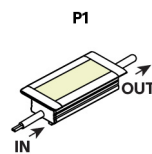
SINGLE (Input only)

S1

IN

End Feed

S2

IN

Bottom Feed

PASS THROUGH (Input/Output)

P1

OUT

IN

End Feed

P2

OUT

IN

Bottom Feed

CONFIGURATION OPTIONS

.29" width of end cap
.29" width of end cap
S1

Single End Feed

S1
P1
Connection by others

Non-Continuous End Feed

.58" width of end cap
S2
P2

Non-Continuous Bottom Feed

.58" width of end cap
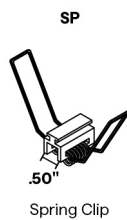S1
S1

Non-Continuous End to End Feed
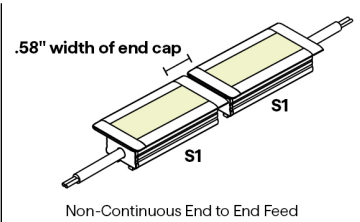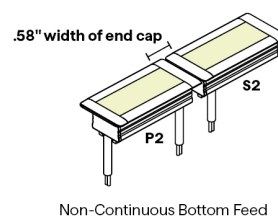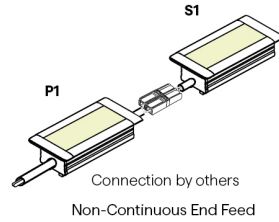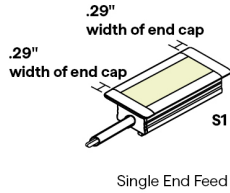
⑧ / ⑨ CONNECTOR/WIRE – IN/OUT

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

BW

.15"

Bare Wire 24"
22 AWG

CON6/CON24

1.63"
.38"
1.34"
.39"

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

⑫ WIRE COLOR

White

Black

⑭ MOUNTING

SP

.50"

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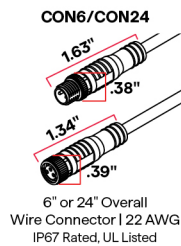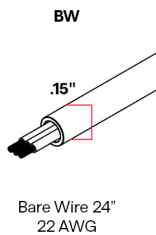
2 clips provided for 4' or less. 4 clips provided for greater than 4'.

To order separately use SP-01

MG

.15"
3.13"
.35"

Magnet Clip

One MG provided per foot

To order separately use MG-02

MMA-02

1.86"
.64"
12"
.58"

Magnet Mount Accessory for MG-02
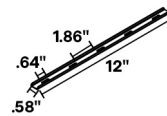
Sold separately, to order use MMA-02

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

Required when mounting to a non-magnetic surface

⑮ FINISH

Satin

Custom finishes require a longer lead time, consult factory

⑰ 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.
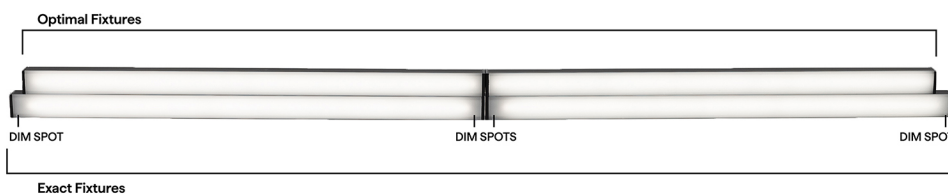
Optimal Fixtures

DIM SPOT
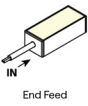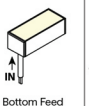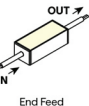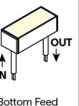DIM SPOTS
DIM SPOT

Exact Fixtures

DW-HE ENC LENGTHS BY INCH

Available in any length in between 12" and 98.43", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of 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: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1 & S2		P1 & P2	
	S1 (End Feed)	S2 (Bottom Feed)	P1 (End Feed)	P2 (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"	

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	

| 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

.58"
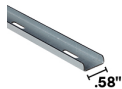
Magnet Mount Accessory
of MG-02

COMPATIBLE WIRING ACCESSORIES

Q-mini-J5

2.80"

2.27"
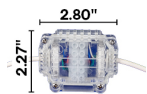
UL Listed, miniature
junction box, DRY/DMP
(WET rated with silicone)

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE

1.36"

2.58"

Wi-Fi or Bluetooth
Connectivity

COMPATIBLE APPS

NFC APP

Q-NFC

Read and write DMX addresses and adjust voltage