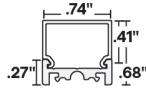
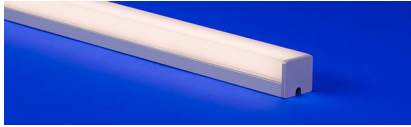




# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

## 24VDC Linear Fixtures - Surface



- Linear fixture designed for surface mount and grid ceiling applications
- Diffused lens
- Three-sided illumination
- Mounting options include hidden stainless steel clip and plastic T-bar 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
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled



410.2 & 410.16  
Closet Rated  
in 1.5HE



BUY AMERICAN  
ACT COMPLIANT



BUILD AMERICA  
BUY AMERICA  
COMPLIANT



### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

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

### 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: **TR1DW-2.5HE-20/30-DRY-STD-DF-P1-BW-BW-BK-CL2-HSS-ST-48"-E**

<b>1 PRODUCT</b> <b>TR1DW</b> <b>TR1DW-USA</b>  Select USA option for BAA and BABA projects. Only DRY ratings apply.  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.	<b>2 WATTS/FT</b>  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE	<b>3 CCT</b>  <b>20/27</b> 2000K/2700K <b>20/30</b> 2000K/3000K <b>27/40</b> 2700K/4000K <b>27/55</b> 2700K/5500K  <b>24/30</b> 2400K/3000K <b>27/40</b> 2700K/4000K	<b>4 RATED</b>  <b>DRY</b> IP20  <b>DMP</b> IP54	<b>5 EFFICIENCY</b>  <b>STD</b> Standard	<b>6 LENS</b>  <b>DF</b> Diffused  For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages			
<b>7 WIRE INPUT/OUTPUT</b>  <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>8 CONNECTOR/WIRE IN</b>  <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>9 CONNECTOR/WIRE OUT</b>  <b>CLS</b> Closed End (No feed)  <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>10 WIRE COLOR</b>  <b>WH</b> White <b>BK</b> Black	<b>11 WIRE TYPE</b>  <b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated  CL2P only available with bare wire leads (BW)	<b>12 MOUNTING</b>  <b>HSS</b> Hidden Stainless Steel Clip <b>TBC-01</b> 9/16" Flat or Tegular TB-Grid <b>TBC-02</b> 15/16" Flat or Tegular TB-Grid	<b>13 FINISH</b>  <b>ST</b> Satin <b>CU</b> Custom  Custom finishes require a longer lead time, consult factory	<b>14 LENGTH (IN)</b>  Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".	<b>15 EXACT/OPTIMAL</b>  <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  
When using TBC Mounting, a bare wire S2 wire feed is recommended.  
See install instructions for details.

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

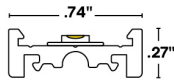
BW: Standard length is 24". Max length is 120".  
Request custom length by writing in part number next to BW (example: BW48)



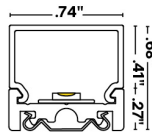
# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

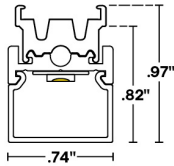
## 1 PRODUCT - DIMENSIONS



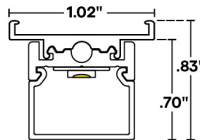
Profile



Profile with hidden stainless steel mounting clip



Profile with TBC-01



Profile with TBC-02

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with TR1DW-\*\*-30-DRY-STD

	1.5HE W/FT		2.5HE W/FT	
	LM/FT	CRI	LM/FT	CRI
DF	130	98	205	98

## 6 DIODE VISIBILITY

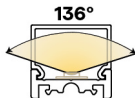


DF - Diffused lens

## PHOTOMETRIC PERFORMANCE

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

DF



Diffused 136°

## 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 - Surface	-4°F	145°F	-4°F	135°F	-4°F	135°F	-4°F	120°F
DMP	Ambient Operating Temp - Surface	-4°F	140°F	-4°F	130°F	-4°F	130°F	-4°F	115°F

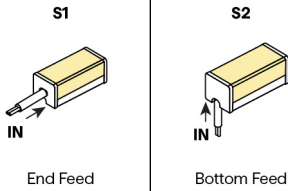


# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

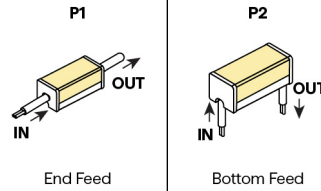
24VDC Linear Fixtures - Surface

## 7 WIRE INPUT/OUTPUT

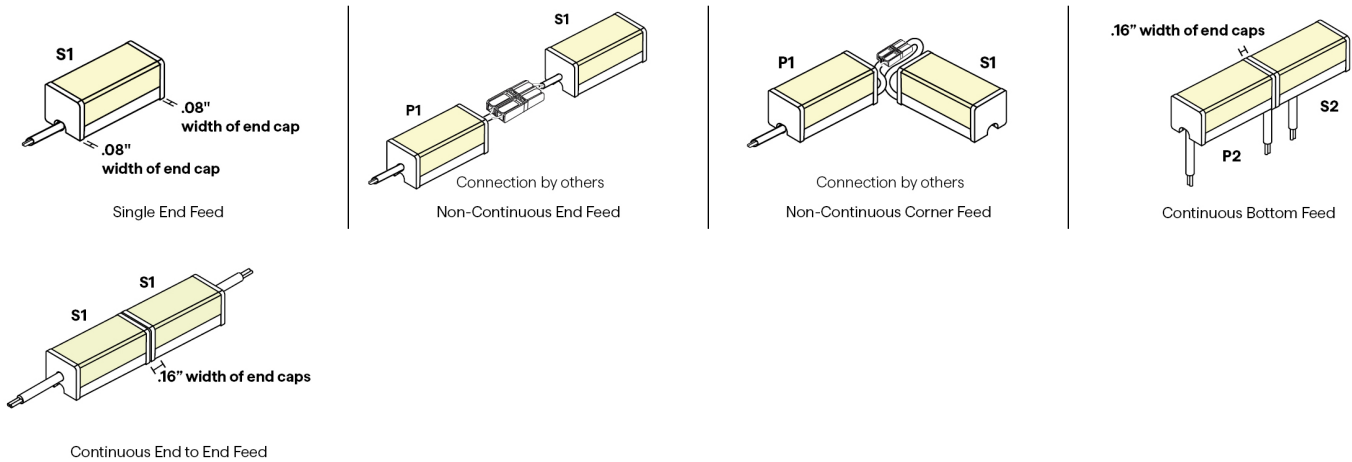
SINGLE (Input only)



PASS THROUGH (Input/Output)

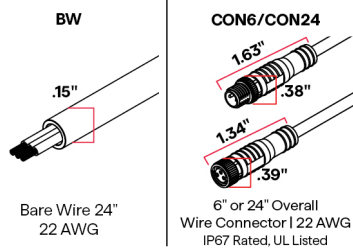


## CONFIGURATION OPTIONS



## 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



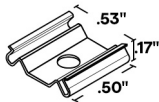


# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

## 12 MOUNTING

### HSS



Hidden Stainless Steel Clip

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

To order separately use SST-02

Each clip comes with a #4 x 5/8" Flat Head SS

### TBC-01



Plastic T-Bar Clip

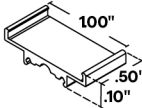
Use on 9/16" Flat or Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length. 1 T-Bar Mounting Jig included with each fixture.

To order separately use TBC-01

Each pair of clips comes with M2.5 x 4mm

### TBC-02



Plastic T-Bar Clip

Use on 15/16" Flat or Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length. 1 T-Bar Mounting Jig included with each fixture.

To order separately use TBC-02

## 13 FINISH



Satin

Custom finishes require a longer lead time, consult factory

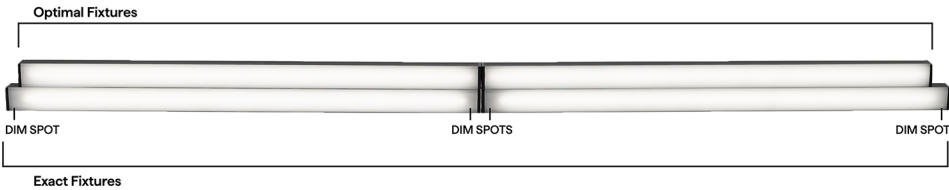
Custom finishes require a longer lead time, consult factory

## 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.



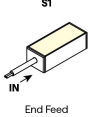


# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

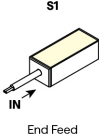
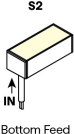
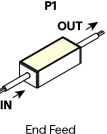
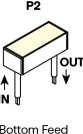
24VDC Linear Fixtures - Surface

## DW-HE DRY DMP LENGTHS BY INCH

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture  S1 
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 	S2 	P1 	P2 
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
	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
1%	QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle




# ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

DIMMING PROTOCOL	INDOOR
	DW-HE Tunable Applications
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN
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
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-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
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle

## COMPATIBLE MOUNTING ACCESSORIES

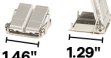
HINGE - HMB-M



1.41" .71"

Adjustable mounting bracket - Medium


HINGE - HMB-L



1.46" 1.29"

Adjustable mounting bracket - Large


HINGE - HMB-XL



1.46" 4"

Adjustable mounting bracket - XLarge


Q-PIVOT



.75" 1.03"

Small mounting accessory

Q-ANGLE



2.23" 1.38"

Adjustable mounting accessory