



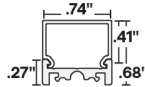
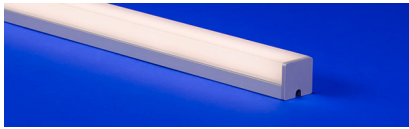
# ESSENTIALS TRE3-FLAT (01)

## WARM DIM APPLICATIONS

### 24VDC Linear Fixtures - Surface



410.2 & 410.16  
Closet Rated  
in 1.5HE



- 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 to provide warmer CCTs as the light is dimmed
- When using DALI and DMX power supplies, LED wattage must be doubled

#### 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: **TR1WD-6.0-19/30-DRY-STD-DF-P1-BW-BW-BK-CL2-HSS-ST-48"-E**

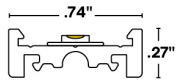
1	PRODUCT	2	WATTS/FT	3	CCT	4	RATED	5	EFFICIENCY	6	LENS
	<b>TR1WD</b>  LED engine is built with 2 wires suitable for phase dimming control. See following pages for compatible power supplies.		<b>6.0</b> 6.0W/ft		<b>19/27</b> 1900K/2700K <b>19/30</b> 1900K/3000K		<b>DRY</b> IP20		<b>STD</b> Standard		<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>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>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE		<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>DRY</b> IP20				
			<b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE		<b>24/30</b> 2400K/3000K <b>27/40</b> 2700K/4000K		<b>DMP</b> IP54				
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 When using TBC Mounting, a bare wire S2 wire feed is recommended. See install instructions for details.	BRL only available with TR1WD BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	BRL only available with TR1WD 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>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>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.						



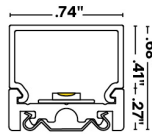
# ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface

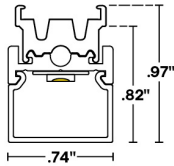
### 1 PRODUCT - DIMENSIONS



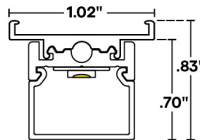
Profile



Profile with hidden stainless steel mounting clip



Profile with TBC-01



Profile with TBC-02

### 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with TR1WD-6.0-30-DRY-STD

	3000K	
	LM/FT	CRI
DF	348	97

[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

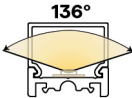


DF - Diffused lens

### 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

		WD 6.0 W/FT		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		QTL power supply other than DALI, DMX	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	115°F	-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

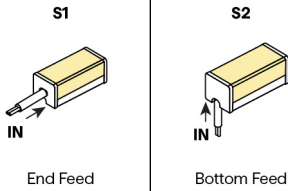


# ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS

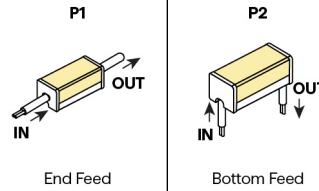
24VDC Linear Fixtures - Surface

## 7 WIRE INPUT/OUTPUT

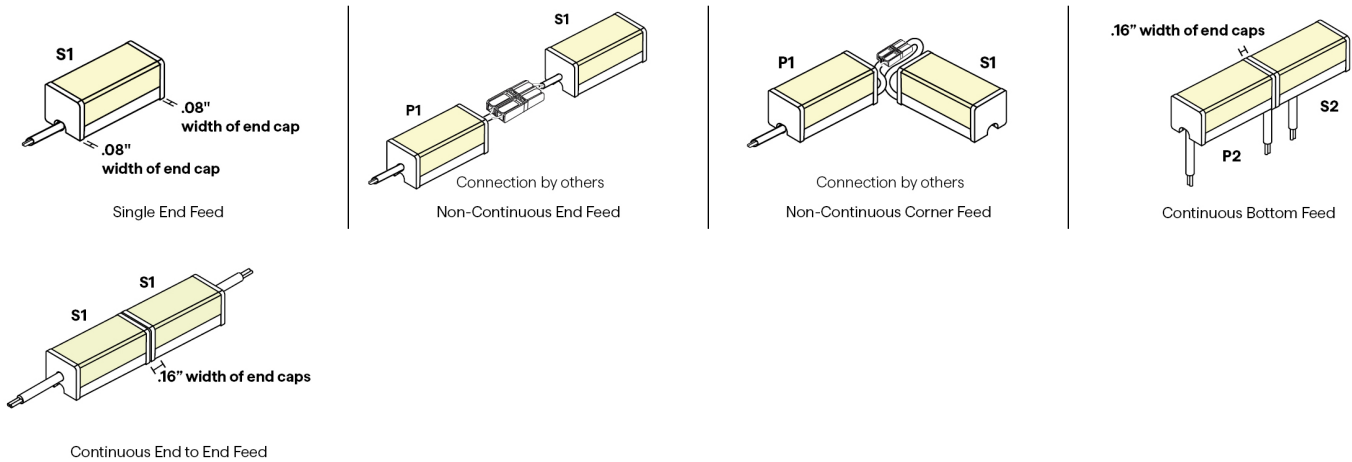
SINGLE (Input only)



PASS THROUGH (Input/Output)

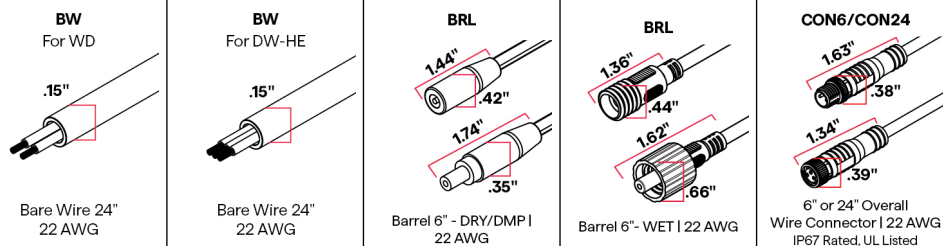


## CONFIGURATION OPTIONS



## 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) WARM DIM 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

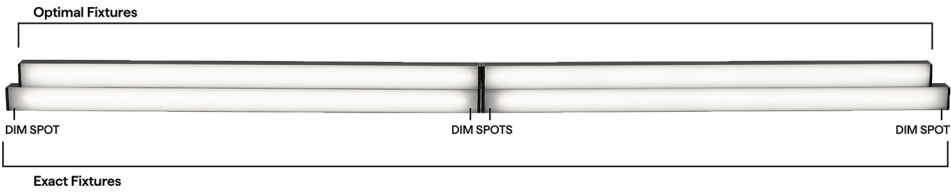
Custom finishes require a longer lead time, consult factory

### 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) WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface

## WD DRY 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

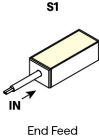
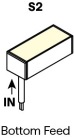
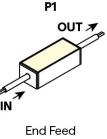
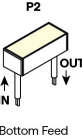
Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.41"		10.66"	
13"	12.41"		12.66"	
14"	12.41"		12.66"	
15"	14.41"		14.66"	
16"	14.41"		14.66"	
17"	16.41"		16.66"	
18"	16.41"		16.66"	
19"	18.41"		18.66"	
20"	18.41"		18.66"	
21"	20.41"		20.66"	
22"	20.41"		20.66"	
23"	22.41"		22.66"	
24"	22.41"		22.66"	
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"	

## DW-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	
				
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"	



# ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface

## 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 Warm Dim Applications	WD
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
1%	QZ-DALI-DT8	QTM-eLED(E) QZ-DALI-DT6
10%	Non-Dim Power Supply with WD App Dongle	Non-Dim Power Supply with SW App Dongle






DIMMING PROTOCOL	INDOOR	
	DW-HE Warm Dim Applications	WD
Phase	QZ-DW	QT-CAB-QZ-PH/0-10V QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
0-10V	QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QTM-eLED+0-10V QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+WD-AWN	QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6-AWN
ECO System		QTM-eLED(E)
DMX If using DW LED, wattage must be doubled		QZ-DMX
DALI-2: DT6 If using DW LED, wattage must be doubled except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6
DALI-2: DT8 If using DW LED, wattage must be doubled 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 WD App Dongle	Non-Dim Power Supply with SW App Dongle



# ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface

## COMPATIBLE MOUNTING ACCESSORIES

<b>HINGE - HMB-M</b>	<b>HINGE - HMB-L</b>	<b>HINGE - HMB-XL</b>	<b>Q-PIVOT</b>	<b>Q-ANGLE</b>
				
1.41" .71"	1.46" 1.29"	1.46" 4"	.75" 1.03"	2.23" 1.38"
Adjustable mounting bracket - Medium	Adjustable mounting bracket - Large	Adjustable mounting bracket - XLarge	Small mounting accessory	Adjustable mounting accessory