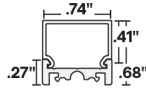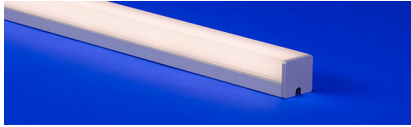# ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS

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

Dimensions: .74", .41", .27", .68"

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	DF									

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

1 — PRODUCT

TR1WD
LED engine is built with 2 wires suitable for phase dimming control.
See following pages for compatible power supplies.

TR1DW
TR1DW-USA
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.

2 — WATTS/FT

6.0	6.0W/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

19/27	1900K/2700K
19/30	1900K/3000K
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
DRY	IP20
DMP	IP54

5 — EFFICIENCY

STD	Standard

6 — LENS

DF	Diffused

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
When using TBC Mounting, a bare wire S2 wire feed is recommended. See install instructions for details.

8 — CONNECTOR/WIRE IN

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

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)

9 — CONNECTOR/WIRE OUT

CLS	Closed End (No feed)
BW	Bare Wire (Standard 24")
BRL	Barrel
CON6	Connector 6"
CON24	Connector 24"

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)

10 — WIRE COLOR

WH	White
BK	Black
N/A	For Barrel

wet barrel only available in black

11 — WIRE TYPE

CL2	Class 2
CL2P	Plenum Rated
N/A	For Barrel

CL2P only available with bare wire leads (BW)

12 — MOUNTING

HSS	Hidden Stainless Steel Clip
TBC-01	9/16" Flat or Tegular TB-Grid
TBC-02	15/16" Flat or Tegular TB-Grid

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.

ESSENTIALS TRE3-FLAT (01) WARM DIM APPLICATIONS
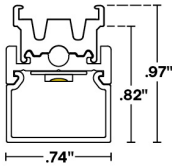## 24VDC Linear Fixtures - Surface

1 PRODUCT - DIMENSIONS
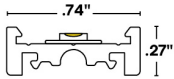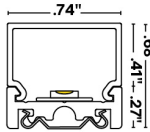
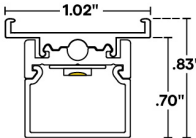|	
Profile	Profile with hidden stainless steel mounting clip

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

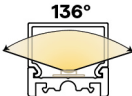|	1.5HE W/FT		2.5HE W/FT	
	LM/FT	CRI	LM/FT	CRI
DF	130	98	205	98

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

136°

Diffused 136°

TEMPERATURE RATINGS

		WD 6.0 W/FT		DW 1.5 HE W/FT QTL power supply other than DALI, DMX		DW 3.0 HE W/FT DALI, DMX, or non-QTL power supply		DW 2.5 HE W/FT QTL power supply other than DALI, DMX		DW 5.0 HE W/FT DALI, DMX, or non-QTL power supply	
		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

7 WIRE INPUT/OUTPUT

SINGLE (Input only)

S1

IN

End Feed

S2

IN

Bottom Feed
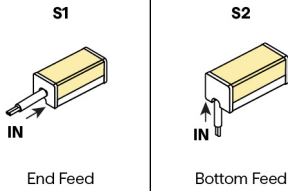
PASS THROUGH (Input/Output)

P1

IN

OUT

End Feed

P2

IN

OUT

Bottom Feed

CONFIGURATION OPTIONS

S1

.08" width of end cap

.08" width of end cap

Single End Feed

P1

S1

Connection by others

Non-Continuous End Feed

P1

S1

Connection by others

Non-Continuous Corner Feed

.16" width of end caps

S2

P2

Continuous Bottom Feed

S1

S1

.16" width of end caps

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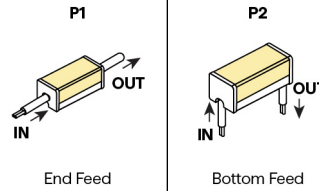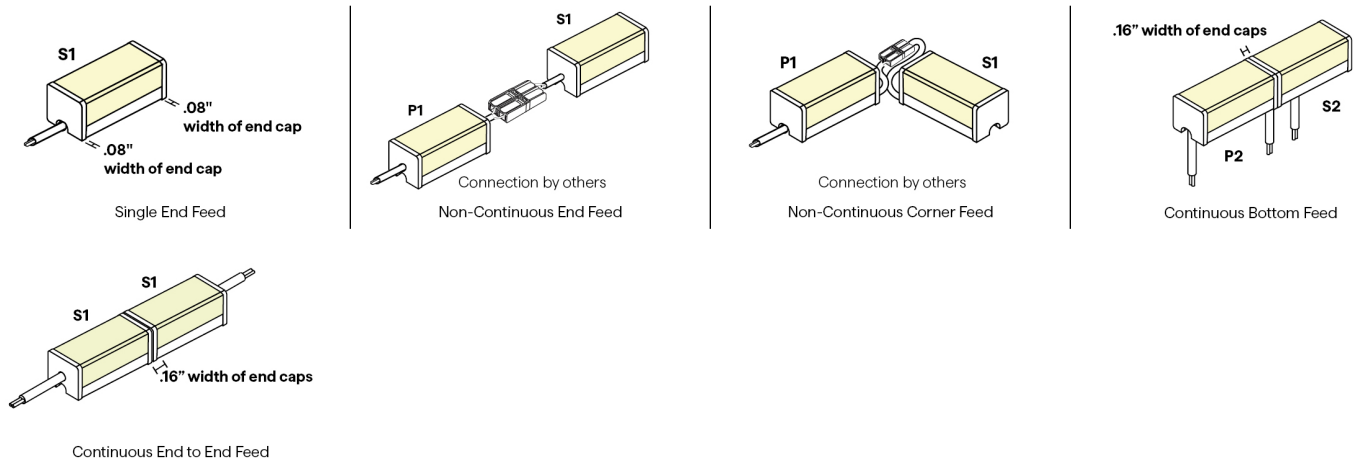
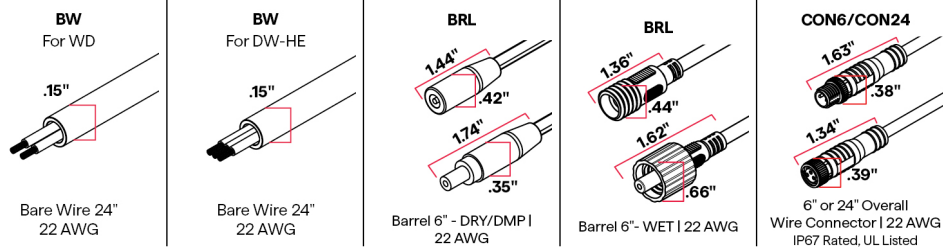## 8 / 9 CONNECTOR/WIRE – IN/OUT

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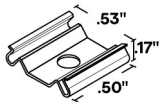
BW
For WD

.15"

Bare Wire 24"
22 AWG

BW
For DW-HE

.15"

Bare Wire 24"
22 AWG

BRL

1.44"

.42"

1.74"

.35"

Barrel 6" - DRY/DMP |
22 AWG

BRL

1.36"

.44"

1.62"

.66"

Barrel 6"- WET | 22 AWG

CON6/CON24

1.63"

.38"

1.34"

.39"

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

10 WIRE COLOR

White

Black

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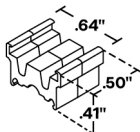
12 MOUNTING

HSS

.53"
.17"
.50"

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
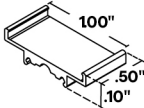
.64"
.50"
.41"

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

100"
.50"
.10"

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
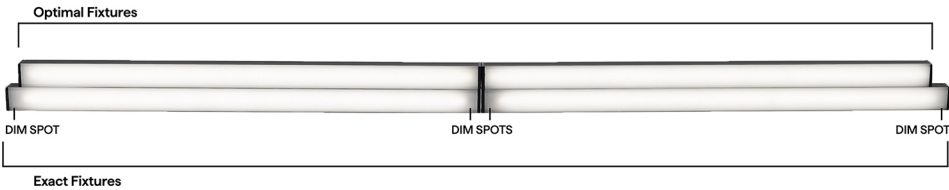
13 FINISH

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.
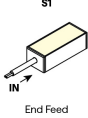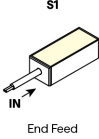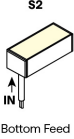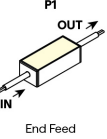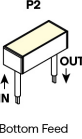
Optimal Fixtures

DIM SPOT   DIM SPOTS   DIM SPOT

Exact Fixtures

WD DRY LENGTHS BY INCH

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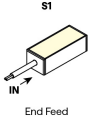
Requested Length	Potential dim spot on either end of a S1 fixture — S1 End Feed
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH
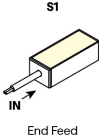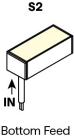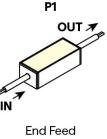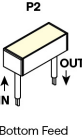
Requested Nominal Length	S1 & S2	P1 & P2
12"	10.41"	10.66"
13"	12.41"	12.66"
14"	12.41"	12.66"
15"	14.41"	14.66"
16"	14.41"	14.66"
17"	16.41"	16.66"
18"	16.41"	16.66"
19"	18.41"	18.66"
20"	18.41"	18.66"
21"	20.41"	20.66"
22"	20.41"	20.66"
23"	22.41"	22.66"
24"	22.41"	22.66"
36"	34.41"	34.66"
48"	46.41"	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 — S1 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
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 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

COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M	HINGE - HMB-L	HINGE - HMB-XL	Q-PIVOT	Q-ANGLE
1.41" .71"	1.46" 1.29"	4" 1.46"	.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