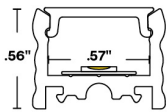# ESSENTIALS TALO-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

Certifications: cULus LISTED · NEC 410.2 & 410.16 Closet Rated in 1.5HE · RoHS Compliant · EPD Environmental Product Declaration · 5 YEAR WARRANTY · BAA BUY AMERICAN ACT COMPLIANT · BABA BUILD AMERICA, BUY AMERICA COMPLIANT · Red List Approved Declare.

Dimensions: .56" · .57" · .19" · .74"

- Linear fixture designed for surface mount and grid ceiling applications
- Choose from diffused, polar, frosted, or clear lens options for varying diode visibility and beam angles
- 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
- 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	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS	WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL
				STD										

Sample Part Number: **TO1DW-2.5HE-20/30-DRY-STD-DF-P1-BW-BW-BK-CL2-HSS-BK-48"-E**

1 PRODUCT

TO1DW
TO1DW-USA

Select USA option for BAA and BABA projects. Only DRY or WET 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

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

DF	Diffused
PR	Polar
FR	Frosted
CL	Clear

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")
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

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
BK	Black
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.
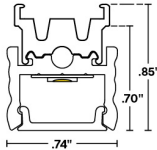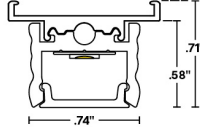
1 PRODUCT - DIMENSIONS

Profile with flat lens
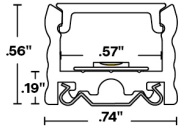
Profile with hidden stainless steel mounting clip

Profile with TBC-01

Profile with TBC-02

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with TO1DW-**-30-DRY-STD

	1.5HE W/FT		2.5HE W/FT	
	LM/FT	CRI	LM/FT	CRI
CL	136	98	215	98
FR	134	98	212	98
PR	123	98	195	98
DF	112	98	177	98

6 DIODE VISIBILITY

DF - Diffused lens

PR - Polar lens

FR - Frosted lens

CL - Clear lens

PHOTOMETRIC PERFORMANCE

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

CL

80°

Clear 80°

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

7 WIRE INPUT/OUTPUT

SINGLE (Input only)

S1

IN

End Feed

S2

IN

Bottom Feed
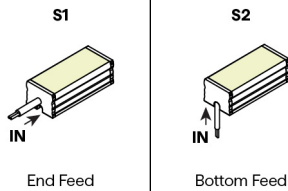
PASS THROUGH (Input/Output)

P1

OUT

IN

End Feed

P2

OUT

IN

Bottom Feed

CONFIGURATION OPTIONS

S1

.08"
width of end cap

.08"
width of end cap

Single End Feed

S1

P1

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
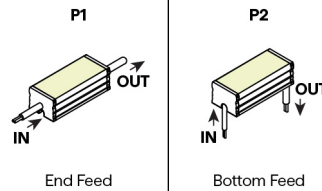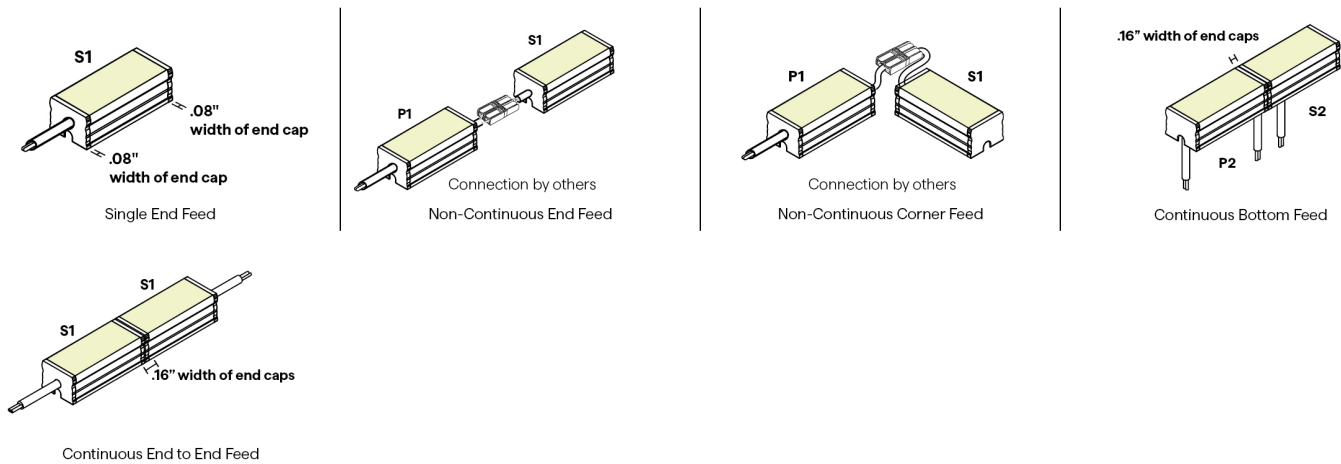
8 / 9 CONNECTOR/WIRE – IN/OUT

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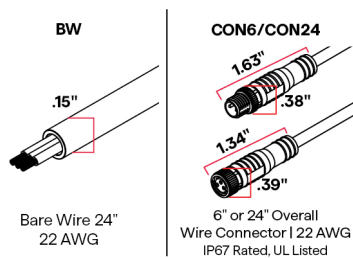
BW

.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

10 WIRE COLOR

White

Black

12 MOUNTING

HSS

.53"
.17"
.50"
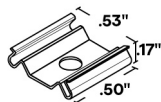
Hidden Stainless Steel Clip

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"
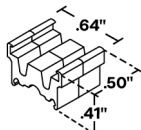
Plastic T-Bar Clip

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"
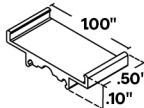
Plastic T-Bar Clip

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

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

13 FINISH

Satin

Black

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.
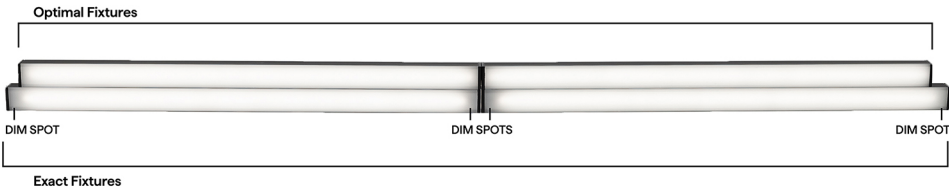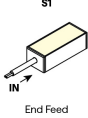
Optimal Fixtures
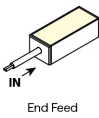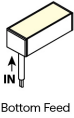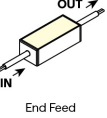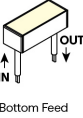
DIM SPOT   DIM SPOTS   DIM SPOT

Exact Fixtures

DW-HE DRY DMP LENGTHS BY INCH

EXACT LENGTH

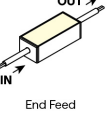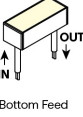| Requested Length	Potential dim spot on either end of a S1 fixture (S1, End Feed)
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH
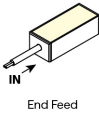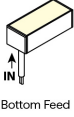
Requested Nominal Length	S1 & S2 (S1 End Feed / S2 Bottom Feed)	P1 & P2 (P1 End Feed / P2 Bottom Feed)
12"	10.51"	10.86"
13"	12.51"	12.86"
14"	12.51"	12.86"
15"	14.51"	14.86"
16"	14.51"	14.86"
17"	16.51"	16.86"
18"	16.51"	16.86"
19"	18.51"	18.86"
20"	18.51"	18.86"
21"	20.51"	20.86"
22"	20.51"	20.86"
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"

DW-HE WET 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 (S1 End Feed / S2 Bottom Feed)	P1 & P2 (P1 End Feed / P2 Bottom Feed)
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"

ESSENTIALS TALO-FLAT (01) FOR TUNABLE 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	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	

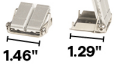| DIMMING PROTOCOL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	DW-HE Tunable Applications
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN	QOM-eLED+TW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN	
DMX LED wattage must be doubled for 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

HINGE - HMB-M	HINGE - HMB-L	HINGE - HMB-XL	Q-PIVOT	Q-ANGLE	VHB
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	Double sided mounting tape