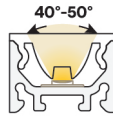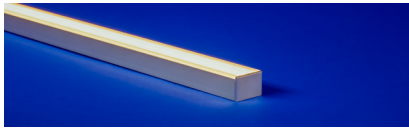# VERS-OPTICS (05) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

40°-50°

- Optically enhanced VERSatile fixture provides precision beam control for when precision lighting is needed
- The high-quality lens features a proprietary diffusing agent for superior beam control and clean edges
- Features integrated metal endcaps
- Mounting options include a concealed or magnetic clip
- With an internal White Optics coating, the fixture achieves greater lumen output
- Durable anodized aluminum housings
- Consult factory for field assembly options
- Optional external louver accessory available in white or black for added glare control

INFORMATION REQUIRED FOR LIGHTING SCHEDULE					
1 PRODUCT	**2** WATTS/ FT	**3** CCT	**4** RATED	**5** LENS	**6** EXTERNAL LOUVER

ADDITIONAL INFORMATION REQUIRED TO ORDER								
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

Sample Part Number: VERS-05-WD-6.0-19/30-DRY-40D-L1-BK-P1-BW-BW-BK-CL2-CC-BK-48"-E

1 PRODUCT

VERS-05-WD

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

VERS-02-DW

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
4.0HE	4.0W/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

4 RATED

DRY	IP20

DRY	IP20

5 LENS

40D	Optical 40°
50D	Optical 50°

For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages.

6 EXTERNAL LOUVER

L1-WH	White Plastic
L1-BK	Black Plastic
L2-ST	Satin Anodized Aluminum
L2-BK	Black Anodized Aluminum
L2-WH	White Powder Coated Aluminum
N/A	No Louver

Plastic Louvers come in 12" lengths, multiple pieces will be used to match fixture length. Aluminum louvers come in maximum 98" lengths and will be cut to match fixture length. White and custom painted finishes are not compatible with L2 external louvers.

7 WIRE INPUT/OUTPUT

SINGLE (Input only)

S1	End Feed
S2	Bottom Feed
S3	Left Side Feed
S4	Right Side Feed

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

PASS THROUGH (Input/output)

P1	End Feed
P2	Bottom Feed
P3	Left Side Feed
P4	Right Side Feed

When using TBC Mounting, a bare wire P2 wire feed is recommended. See install instructions for details.

8 CONNECTOR/WIRE IN

BW	Bare Wire (Standard 36")
CON6	Connector 6"
CON24	Connector 24"

BW: Standard length is 36", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

BW	Bare Wire (Standard 36")
CON6	Connector 6"
CON24	Connector 24"

BW: Standard length is 36", 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 36")
CON6	Connector 6"
CON24	Connector 24"

BW: Standard length is 36", 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

CC	Concealed Clip
MG	Magnet
TBC-03	9/16" Flat TB-Grid
TBC-04	15/16" Flat or Tegular TB-Grid
TBC-05	9/16" Tegular TB-Grid or 9/16" Flat TB-Grid, with External Louver
TBC-06	9/16" Tegular TB-Grid, with External Louver
TBC-07	15/16" Flat TB-Grid, with External Louver
TBC-08	15/16" Tegular TB-Grid, with External Louver

13 FINISH

ST	Satin
BK	Black
BZ	Bronze
WH	White
CU	Custom

White and custom painted finishes are not compatible with external louvers.
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.
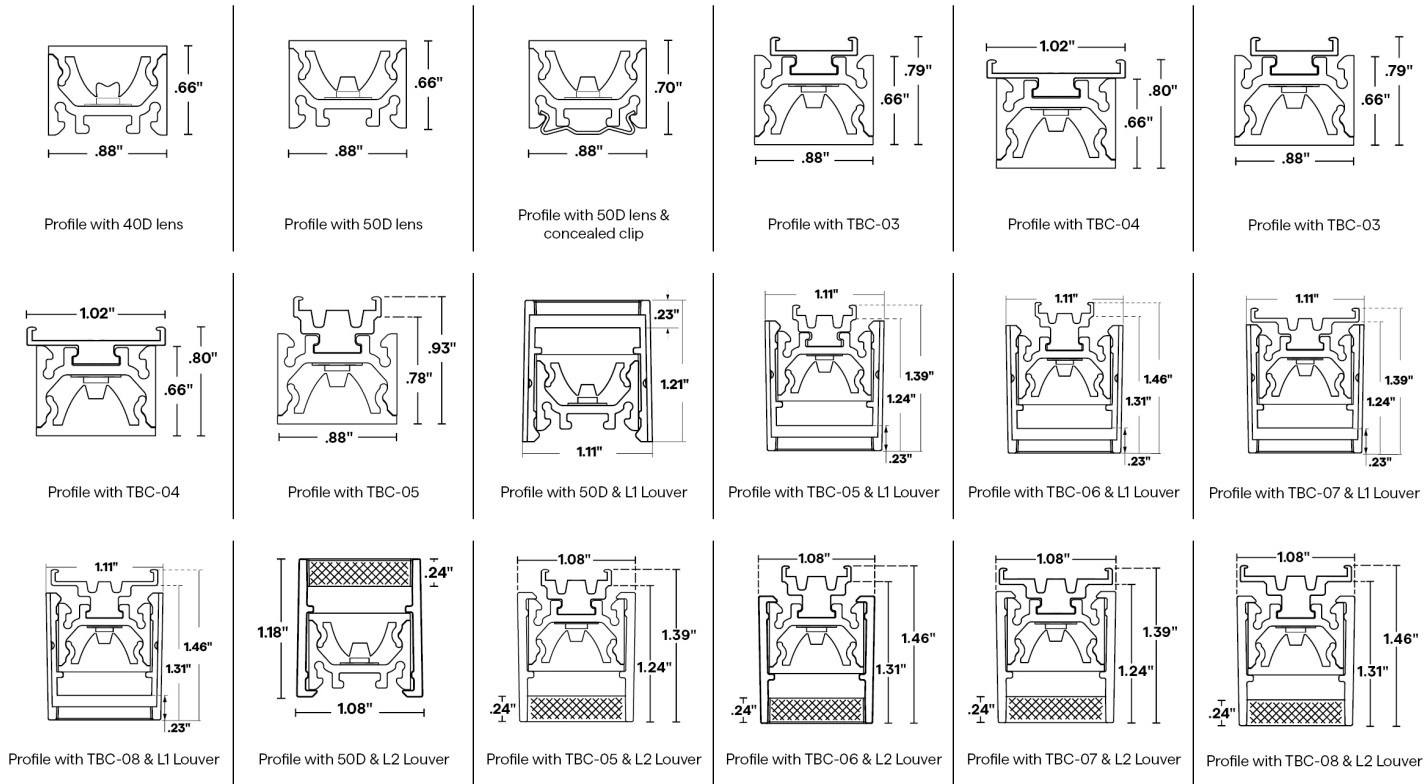
VERS-OPTICS (05) FOR WARM DIM APPLICATIONS
24VDC Linear Fixtures - Surface & Recessed

1 PRODUCT - DIMENSIONS

Profile with 40D lens	Profile with 50D lens
Profile with 50D lens & concealed clip	Profile with TBC-03
Profile with TBC-04	Profile with TBC-03
Profile with TBC-04	Profile with TBC-05
Profile with 50D & L1 Louver	Profile with TBC-05 & L1 Louver
Profile with TBC-06 & L1 Louver	Profile with TBC-07 & L1 Louver
Profile with TBC-08 & L1 Louver	Profile with 50D & L2 Louver
Profile with TBC-05 & L2 Louver	Profile with TBC-06 & L2 Louver
Profile with TBC-07 & L2 Louver	Profile with TBC-08 & L2 Louver

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with VERS-05-WD-**-30-DRY

	6.0 W/FT	
	LM/FT	CRI
40D	472	97
50D	494	97

[Calculated L70 = 70000 hrs]
Tested with VERS-05-DW-**-30-DRY

	1.5HE W/FT		2.5HE W/FT		4.0HE W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
40D	159	98	247	98	384	98
50D	163	98	258	98	398	98

5 DIODE VISIBILITY

Optical lens

PHOTOMETRIC PERFORMANCE

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

6W/ft   40D lens


40.8°

6W/ft   50D lens

54.8°
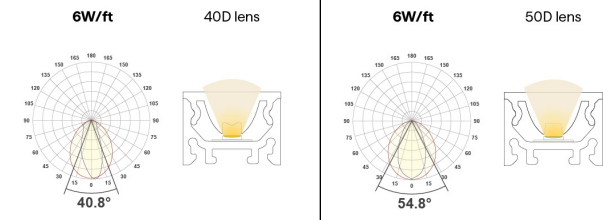
TEMPERATURE RATINGS

		WD 6.0 W/FT		DW 1.5 HE W/FT				DW 2.5 HE W/FT				DW 4.0 HE W/FT			
				Q-Tran power supply other than DALI, DMX		DALI, DMX, or non-Q-Tran power supply		Q-Tran power supply other than DALI, DMX		DALI, DMX, or non-Q-Tran power supply		Q-Tran power supply other than DALI, DMX		DALI, DMX, or non-Q-Tran power supply	
		Min	Max	Min	Max	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	-4°F	125°F	-4°F	110°F

6 EXTERNAL LOUVER

PLASTIC

12.25"

.46"   .65"   .1"   .23"
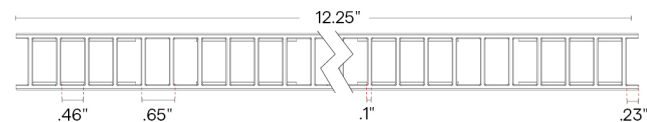
L1-XX
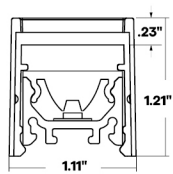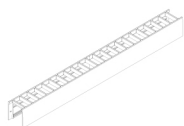
Profile with plastic louver

.23"
1.21"
1.11"

Lumen Multiplier

WH	BK
0.71	0.48

METAL

98"

.46"   .65"   .1"   .23"
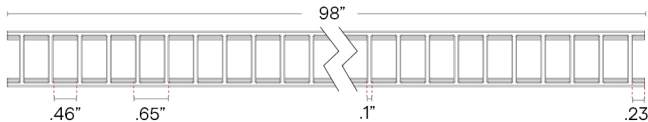
L2-XX
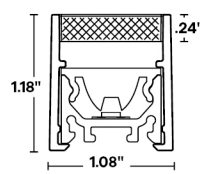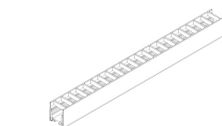
Profile with metal louver

.24"
1.18"
1.08"

Lumen Multiplier

WH	BK	ST
0.72	0.53	0.68

7 WIRE INPUT/OUTPUT

SINGLE (Input only)

S1	S2	S3	S4
IN	IN	IN	IN
End Feed	Bottom Feed	Side Feed - Left	Side Feed - Right

PASS THROUGH (Input/Output)
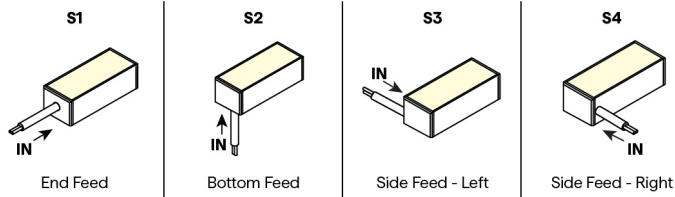
P1	P2	P3	P4
OUT / IN	OUT / IN	IN / OUT	OUT / IN
End Feed	Bottom Feed	Side Feed - Left	Side Feed - Right

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

S3 / P3
.16" width of end caps
Continuous Side Feed - Left

.16" width of end caps
S4 / P4
Continuous Side Feed - Right

S1 / S1
.16" width of end caps
Continuous End to End Feed
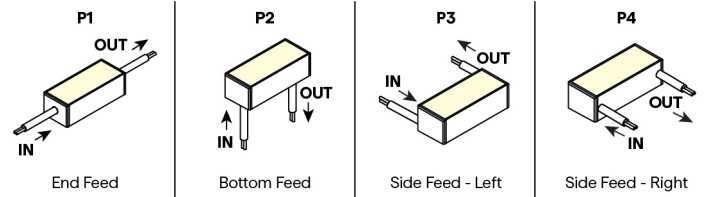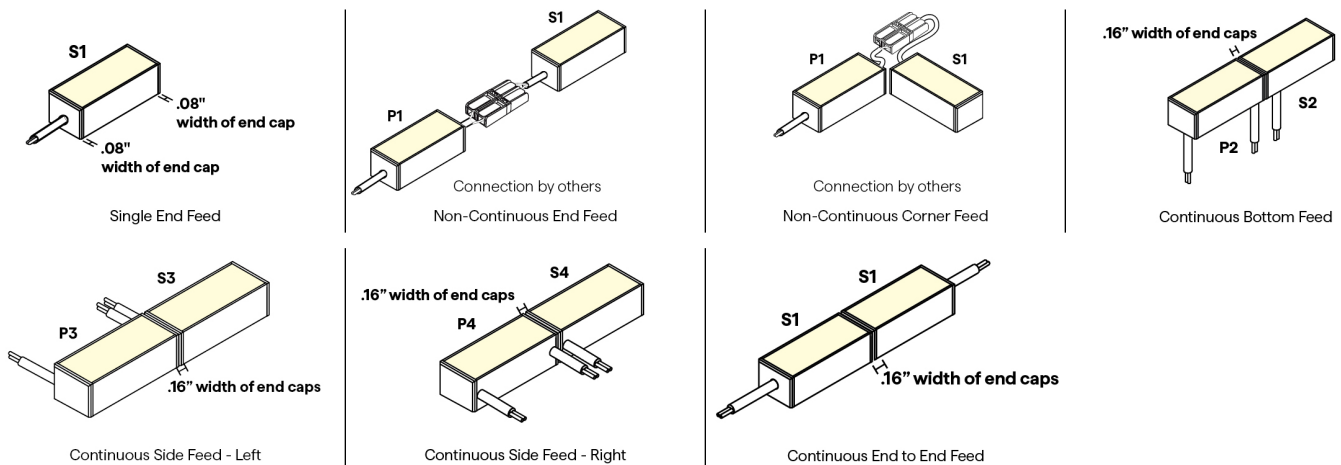
8 / 9 CONNECTOR/WIRE – IN/OUT

Connector/Wire In or Out not needed to specify product.
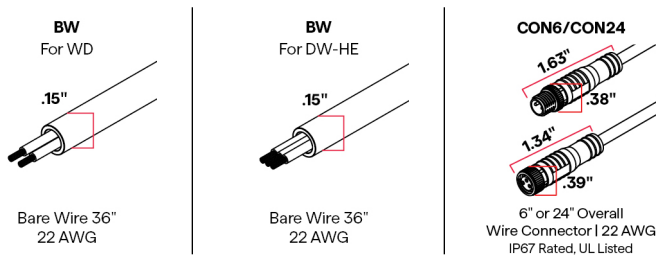
BW
For WD
.15"
Bare Wire 36"
22 AWG

BW
For DW-HE
.15"
Bare Wire 36"
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

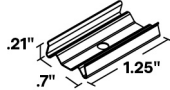Black

12 MOUNTING

CC
(CC-01)

Concealed Clip

2 pieces of hardware provided for 4' or less; 4 pieces of hardware provided for greater than 4'

To order separately use CC-01

Each clips comes with a #4 x 5/8" Flat Head screw.
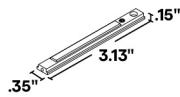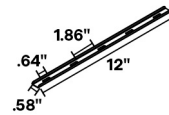
CC
(CC-02)

Louver Concealed Clip
Required if L1 or L2 Louver is selected

2 pieces of hardware provided for 4' or less; 4 pieces of hardware provided for greater than 4'

To order separately use CC-02

Each clips comes with a #4 x 5/8" Flat Head screw.

MG

Magnet Clip

One MG provided per foot
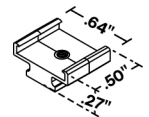
To order separately use MG-02

MMA-02

Magnet Mount
Accessory for MG-02

Sold separately, to order use MMA-02

Each clip comes with a #6 Flat Screw

Required when mounting to a non-magnetic surface

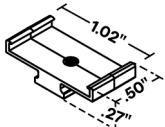**TBC-03**

Plastic T-Bar Clip

Use on 9/16" Flat Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length

To order separately use TBC-03

Each pair of clips comes with M2.5 x 4mm set screw and Allen key
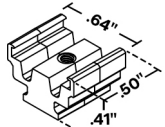
TBC-04

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

To order separately use TBC-04

Each pair of clips comes with M2.5 x 4mm set screw and Allen key

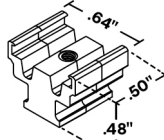**TBC-05**

Plastic T-Bar Clip

Use on 9/16" Tegular Drop Ceiling or with Louver on 9/16" Flat Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length

To order separately use TBC-05

Each pair of clips comes with M2.5 x 4mm set screw and Allen key
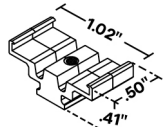
TBC-06

Plastic T-Bar Clip

Use with Louver on 9/16" Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length

To order separately use TBC-06

Each pair of clips comes with M2.5 x 4mm set screw and Allen key

TBC-07

Plastic T-Bar Clip

Use with Louver on 15/16" Flat Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length

To order separately use TBC-07

Each pair of clips comes with M2.5 x 4mm set screw and Allen key
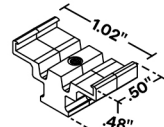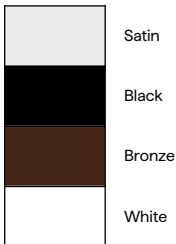
TBC-08

Plastic T-Bar Clip

Use with Louver on 15/16" Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length

To order separately use TBC-08

Each pair of clips comes with M2.5 x 4mm set screw and Allen key

13 FINISH

- Satin
- Black
- Bronze
- White

Custom color available

15 EXACT/OPTIMAL FIXTURE LENGTH

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
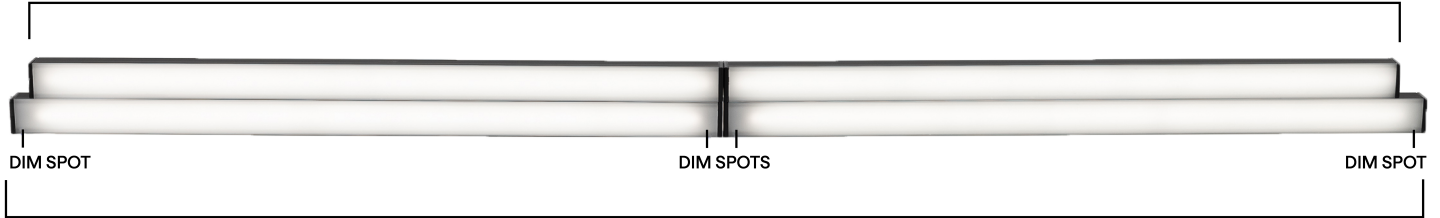
Exact Fixtures

WD DRY LENGTHS BY INCH

Available in any length in between 12" and 98" not including end caps, 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	S3 & S4	P3 & P4
	S1 End Feed / S2 Bottom Feed	P1 End Feed / P2 Bottom Feed	S3 Side Feed - Left / S4 Side Feed - Right	P3 Side Feed - Left / P4 Side Feed - Right
12"	10.49"	10.74"	10.34"	10.44"
13"	12.49"	12.74"	12.34"	12.44"
14"	12.49"	12.74"	12.34"	12.44"
15"	14.49"	14.74"	14.34"	14.44"
16"	14.49"	14.74"	14.34"	14.44"
17"	16.49"	16.74"	16.34"	16.44"
18"	16.49"	16.74"	16.34"	16.44"
19"	18.49"	18.74"	18.34"	18.44"
20"	18.49"	18.74"	18.34"	18.44"
21"	20.49"	20.74"	20.34"	20.44"
22"	20.49"	20.74"	20.34"	20.44"
23"	22.49"	22.74"	22.34"	22.44"
24"	22.49"	22.74"	22.34"	22.44"
36"	34.49"	34.74"	34.34"	34.44"
48"	46.49"	46.74"	46.34"	46.44"
60"	58.49"	58.74"	58.34"	58.44"
72"	70.49"	70.74"	70.34"	70.44"
84"	82.49"	82.74"	82.34"	82.44"
96"	94.49"	94.74"	94.34"	94.44"

DW-HE DRY LENGTHS BY INCH

Available in any length in between 12" and 98" not including end caps, 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	S3 & S4	P3 & P4
	S1 / S2 (End Feed / Bottom Feed)	P1 / P2 (End Feed / Bottom Feed)	S3 / S4 (Side Feed - Left / Side Feed - Right)	P3 / P4 (Side Feed - Left / Side Feed - Right)
12"	10.59"	10.94"	10.49"	10.59"
13"	12.59"	12.94"	12.49"	12.59"
14"	12.59"	12.94"	12.49"	12.59"
15"	14.59"	14.94"	14.49"	14.59"
16"	14.59"	14.94"	14.49"	14.59"
17"	16.59"	16.94"	16.49"	16.59"
18"	16.59"	16.94"	16.49"	16.59"
19"	18.59"	18.94"	18.49"	18.59"
20"	18.59"	18.94"	18.49"	18.59"
21"	20.59"	20.94"	20.49"	20.59"
22"	20.59"	20.94"	20.49"	20.59"
23"	22.59"	22.94"	22.49"	22.59"
24"	22.59"	22.94"	22.49"	22.59"
36"	34.59"	34.94"	34.49"	34.59"
48"	46.59"	46.94"	46.49"	46.59"
60"	58.59"	58.94"	58.49"	58.59"
72"	70.59"	70.94"	70.49"	70.59"
84"	82.59"	82.94"	82.49"	82.59"
96"	94.59"	94.94"	94.49"	94.59"

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

VERS-OPTICS (05) FOR WARM DIM APPLICATIONS
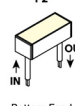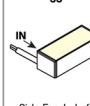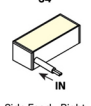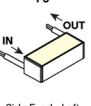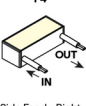## 24VDC Linear Fixtures - Surface & Recessed

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	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6
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
1.41" .71"
Adjustable mounting bracket - Medium

HINGE - HMB-L
1.46" 1.29"
Adjustable mounting bracket - Large

HINGE - HMB-XL
4" 1.46"
Adjustable mounting bracket - XLarge

Q-PIVOT
.75" 1.03"
Small mounting accessory

Q-ANGLE
2.23" 1.38"
Adjustable mounting accessory

NJ-LARGE
J Mounting Bracket

NU-LARGE
U Mounting Bracket

SD-J-LARGE
J Mounting Bracket

BL-LARGE
Backwards L Mounting Bracket
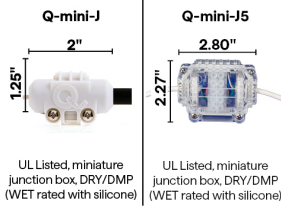
NL-LARGE
L Mounting Bracket

SD-L-LARGE
L Mounting Bracket

VERS-OPTICS (05) FOR WARM DIM APPLICATIONS
24VDC Linear Fixtures - Surface & Recessed

COMPATIBLE WIRING ACCESSORIES

Q-mini-J

2"

1.25"

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

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
By QTL

Read and write DMX addresses and adjust voltage