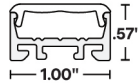
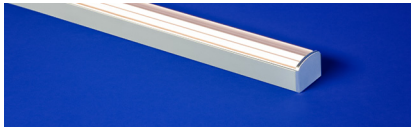




# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed



- Choose from 9 lens options: 40°, 60°, 70°, 90°, 110°, 155°, 180°, Asymmetric, & Forward Throw
- Delivers smooth and consistent light to highlight architectural features and surfaces
- Ideal for surface-mounted or recessed installations
- Integrated metal end caps combined with an extruded aluminum housing give this fixture a polished modern look
- When using a DW LED and DALI or DMX power supplies, LED wattage must be doubled

1	2	3	4	5	6	7	8	9	10	11	12	13	14
PRODUCT	WATTS/ FT	CCT	RATED	LENS	WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL

Sample Part Number: **OP2WD-6.0-19/30-DRY-P1-CON6-CON6-WH-CL2-CC-WH-48"-E**

<b>1</b> <b>PRODUCT</b>  <b>OP2WD</b>  LED engine is built with 2 wires suitable for phase dimming control. See following pages for compatible power supplies.  <b>OP2DW</b> <b>OP2DW-USA</b>  Select USA option for BAA and BABA projects.  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</b> <b>WATTS/FT</b>  <b>6.0</b> 6.0W/ft  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE <b>4.0HE</b> 4.0W/ft HE  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE	<b>3</b> <b>CCT</b>  <b>19/27</b> 1900K/2700K <b>19/30</b> 1900K/3000K  <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>18/30</b> 1800K/3000K <b>18/35</b> 1800K/3500K <b>20/27</b> 2000K/2700K <b>20/30</b> 2000K/3000K <b>24/40</b> 2400K/4000K <b>27/40</b> 2700K/4000K <b>27/55</b> 2700K/5500K	<b>4</b> <b>RATED</b>  <b>DRY</b> IP20 <b>DMP</b> IP54  <b>DRY</b> IP20  <b>DMP</b> IP54	<b>5</b> <b>LENS</b>  <b>40D</b> Optical 40° <b>60D</b> Optical 60° <b>70D</b> Optical 70° <b>90D</b> Optical 90° <b>110D</b> Optical 110° <b>155D</b> Optical 155° <b>180D</b> Optical 180°  <b>ASYM</b> Asymmetric <b>FT</b> Forward Throw  40D, 60D, 70D, 90D, 110D, 155D, 180D, and ASYM are offered in 44.9" lengths. For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages	<b>6</b> <b>WIRE INPUT/OUTPUT</b>  <b>S1</b> Single 1 (Input only) - End Feed <b>S2</b> Single 2 (Input only) - Bottom Feed  <b>P1</b> Pass Through 1 (Input/output) - End Feed <b>P2</b> Pass Through 2 (Input/output) - Bottom Feed  <b>S1A</b> Single 1 (Input only) - End Feed <b>S1B</b> Single 1 (Input only) - End Feed <b>S2A</b> Single 2 (Input only) - Bottom Feed <b>S2B</b> Single 2 (Input only) - Bottom Feed  <b>P1A</b> Pass Through 1 (Input/output) - End Feed <b>P1B</b> Pass Through 1 (Input/output) - End Feed <b>P2A</b> Pass Through 2 (Input/output) - Bottom Feed <b>P2B</b> Pass Through 2 (Input/output) - Bottom Feed	<b>7</b> <b>CONNECTOR/WIRE IN</b>  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>8</b> <b>CONNECTOR/WIRE OUT</b>  <b>CLS</b> Closed End (No feed)  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>CLS</b> Closed End (No feed)  <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>9</b> <b>WIRE COLOR</b>  <b>WH</b> White <b>BK</b> Black	<b>10</b> <b>WIRE TYPE</b>  <b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated  CL2P only available with bare wire leads (BW)	<b>11</b> <b>MOUNTING</b>  <b>CC</b> Concealed Clip <b>MG</b> Magnet	<b>12</b> <b>FINISH</b>  <b>ST</b> Satin <b>BK</b> Black <b>WH</b> White <b>CU</b> Custom  Custom finishes have longer lead times. Non-RAL 9003 whites custom.	<b>13</b> <b>LENGTH (IN)</b>  Minimum length is 12", maximum length is 98.43" not including end caps. Contact us for lengths under 12".	<b>14</b> <b>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.
---	--	--	--	---	--	--	---	---	--	--	--	---	--

For continuous mounting, consider bottom feed.

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

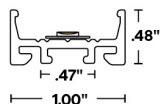
BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)



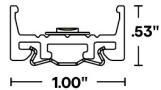
# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

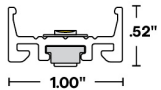
## 1 PRODUCT - DIMENSIONS



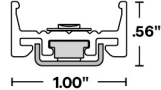
Profile



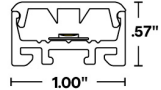
Profile with concealed clip



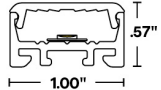
Profile with magnet clip



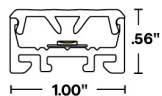
Profile with magnet mount clip and magnet mount accessory



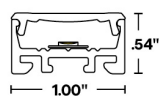
Profile with 40D lens



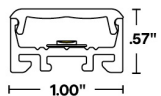
Profile with 60D lens



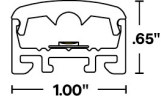
Profile with 70D lens



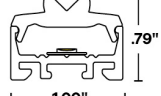
Profile with 90D lens



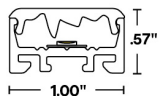
Profile with 110D lens



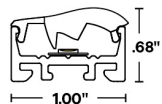
Profile with 155D lens



Profile with 180D lens



Profile with asymmetric lens



Profile with forward throw lens

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with OP2DW-6.0-30-DRY-\*\*

	3000K	
	LM/FT	CRI
40D	469	97
60D	415	97
70D	427	97
90D	425	97
110D	433	97
155D	437	97
180D	434	97
ASYM	432	97
FT	359	97

[Calculated L70 = 70000 hrs]  
Tested with OP2DW-2.5HE-30-DRY-\*\*

	3000K	
	LM/FT	CRI
40D	262	98
60D	246	98
70D	251	98
90D	249	98
110D	240	98
155D	243	98
180D	245	98
ASYM	245	98
FT	213	98



# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

### TEMPERATURE RATINGS

DRY	Ambient Operating Temp - Surface	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		DW 4.0 HE W/FT		DW 8.0 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		DALI, DMX, or non-QTL power supply		DALI, DMX, or non-QTL power supply	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
		-4°F	120°F	-4°F	145°F	-4°F	135°F	-4°F	140°F	-4°F	125°F	-4°F	130°F	-4°F	115°F

### 5 DIODE VISIBILITY

	Optical 40°
	Optical 60°
	Optical 70°
	Optical 90°
	Optical 110°
	Optical 155°
	Optical 180°
	Asymmetric
	Forward Throw

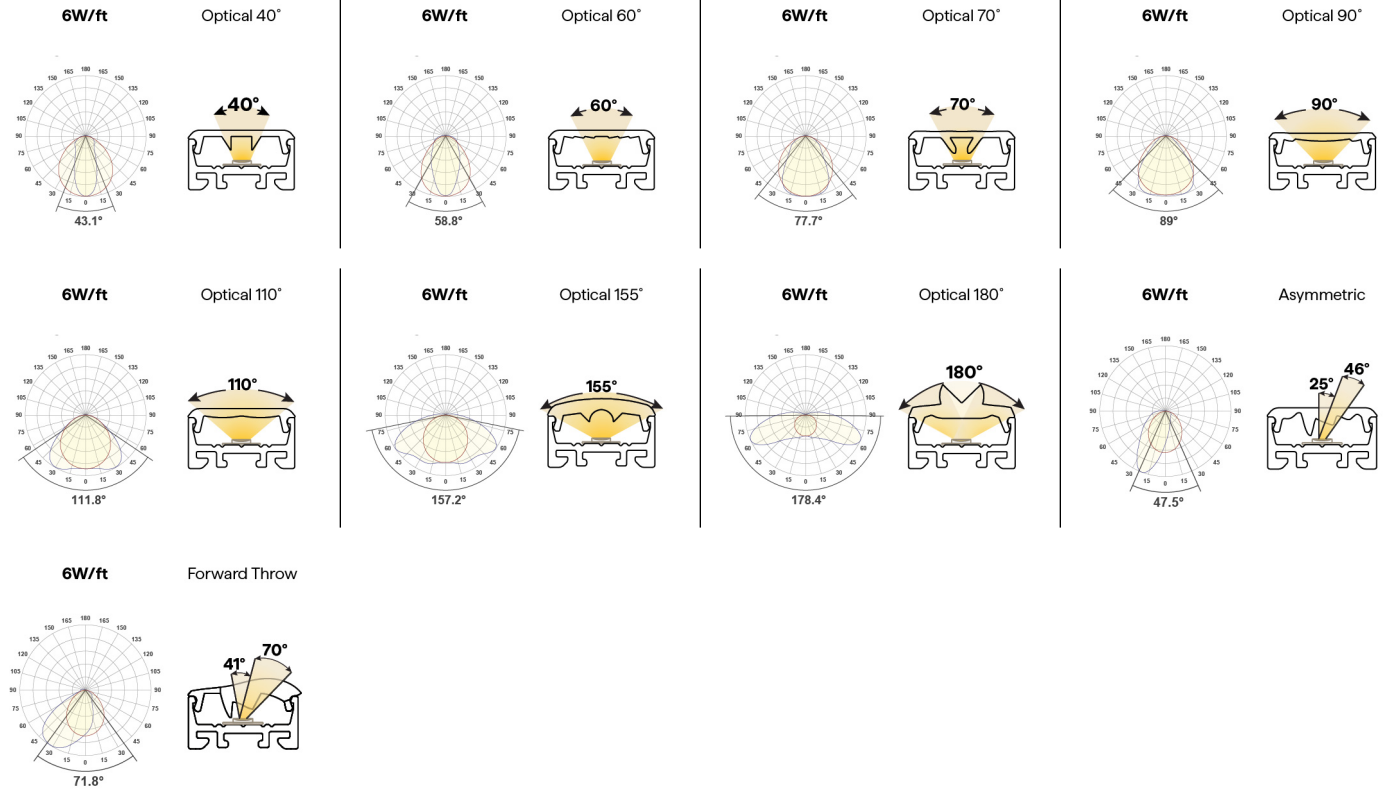


# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

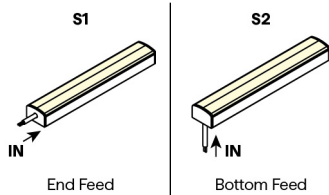
## PHOTOMETRIC PERFORMANCE

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

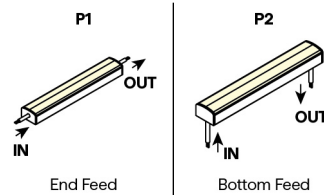


## 6 WIRE INPUT/OUTPUT

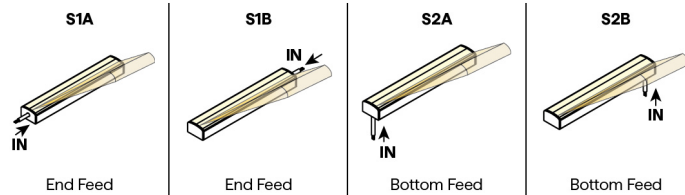
SINGLE (Input only)



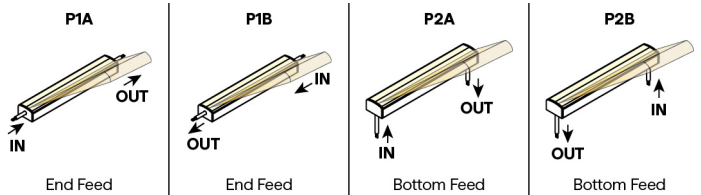
PASS THROUGH (Input/Output)



ASYMMETRIC ONLY SINGLE (Input only)



ASYMMETRIC ONLY PASS THROUGH (Input/Output)

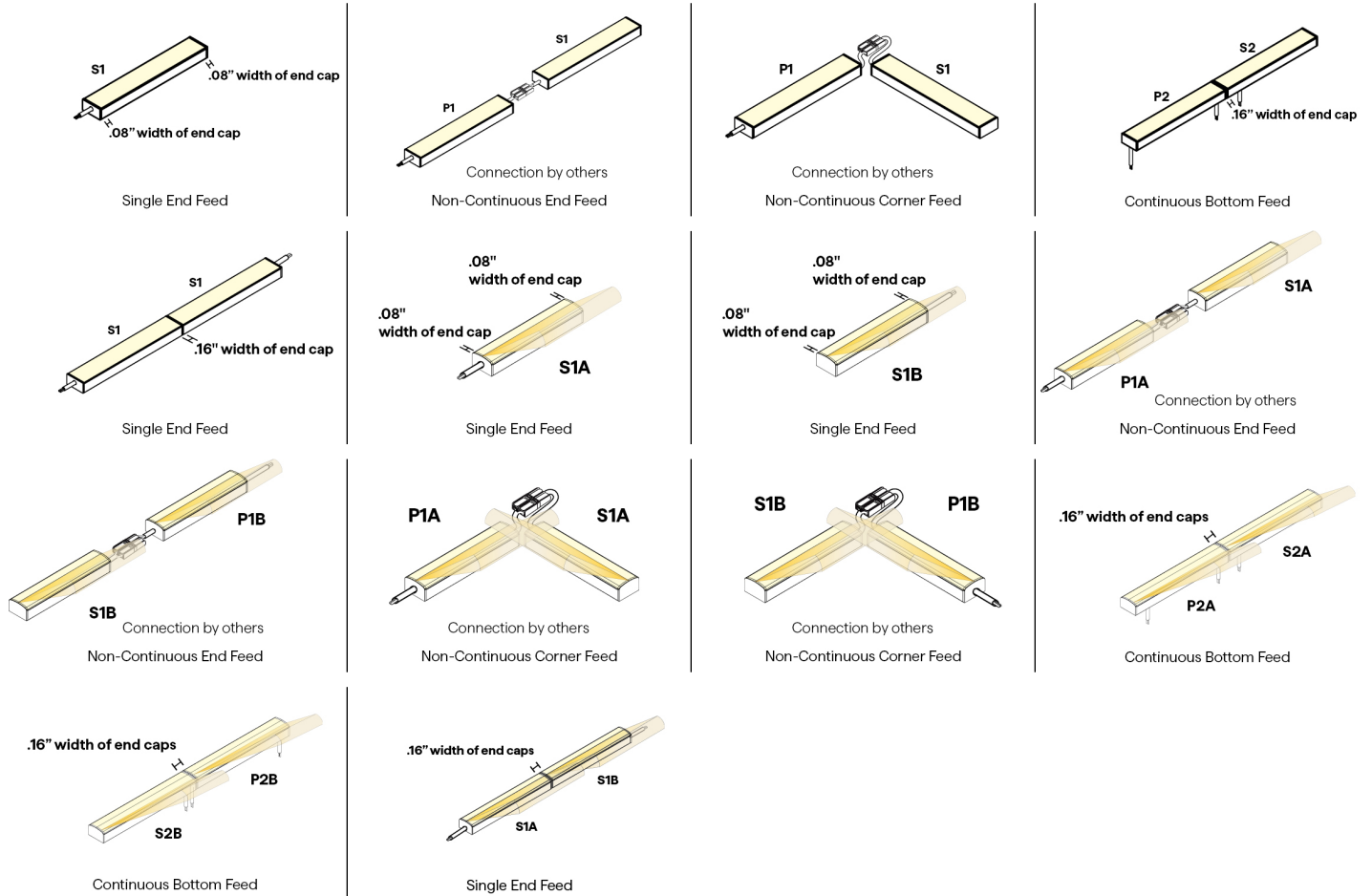




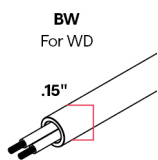
# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

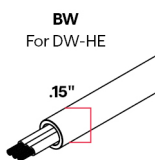
## CONFIGURATION OPTIONS



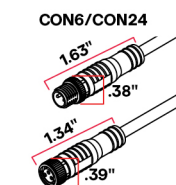
## 7 / 8 CONNECTOR/WIRE - IN/OUT



Bare Wire 36"  
22 AWG

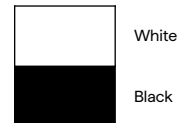


Bare Wire 36"  
22 AWG



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

## 9 WIRE COLOR



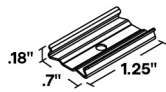


# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

### 11 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 (sold in pairs)

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

MG

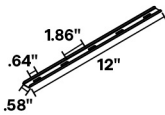


Magnet Clip

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 bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

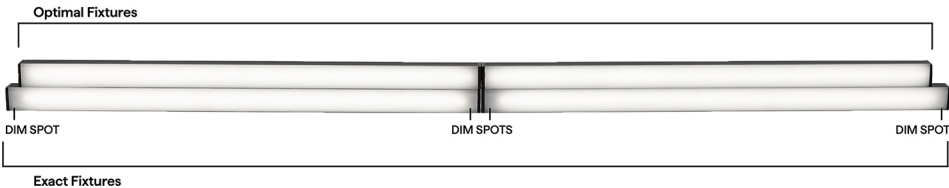
### 12 FINISH



Custom finishes require a longer lead time, consult factory

### 14 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.





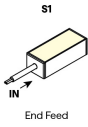
# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

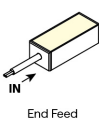
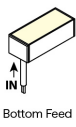
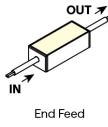
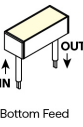
### WD DRY LENGTHS BY INCH

Available in any length in between 12" and 98.43" 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 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"

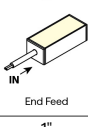
#### OPTIMAL LENGTH

Requested Nominal Length	S1 & S1A/B & S2 & S2A/B		P1 & P1A/B & P2 & P2A/B	
				
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"	

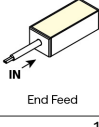
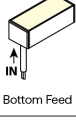
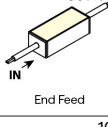
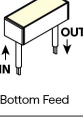
### DW-HE DRY LENGTHS BY INCH

Available in any length in between 12" and 98.43" 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 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 & S1A/B & S2 & S2A/B		P1 & P1A/B & P2 & P2A/B	
				
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"	



# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

## 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


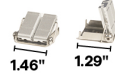



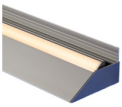



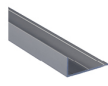


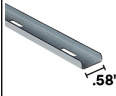




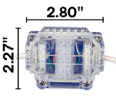

# OPTI-OPTICS (02) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

### COMPATIBLE MOUNTING ACCESSORIES

<b>HINGE - HMB-M</b>  1.41" .71" Adjustable mounting bracket - Medium	<b>HINGE - HMB-L</b>  1.46" 1.29" Adjustable mounting bracket - Large	<b>HINGE - HMB-XL</b>  4" 1.46" Adjustable mounting bracket - XLarge	<b>Q-PIVOT</b>  .75" 1.03" Small mounting accessory	<b>Q-ANGLE</b>  2.23" 1.38" Adjustable mounting accessory	<b>QUOVA-STANDARD</b>  QUOVA Knife Edge	<b>NJ-LARGE</b>  J Mounting Bracket	<b>NU-LARGE</b>  U Mounting Bracket	<b>SD-J-LARGE</b>  J Mounting Bracket	<b>BL-LARGE</b>  Backwards L Mounting Bracket
<b>NL-LARGE</b>  L Mounting Bracket	<b>SD-L-LARGE</b>  L Mounting Bracket	<b>MMA-02</b>  .58" Magnet Mount Accessory of MG-02							

### COMPATIBLE WIRING ACCESSORIES

<b>Q-mini-J5</b>  2.80" 2.27" UL Listed miniature junction box, DRY/DMP (WET rated with silicone)	<b>CON120-EXT</b>  10ft Con cable extender DRY/DMP/WET
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### COMPATIBLE CONTROL ACCESSORIES

<b>SCENE APP DONGLE</b>  1.36" 2.58" Wi-Fi or Bluetooth Connectivity
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### COMPATIBLE APPS

<b>NFC APP</b>  Read and write DMX addresses and adjust voltage
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