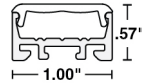
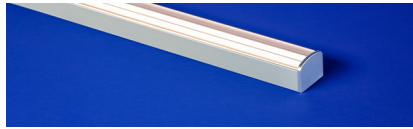




# TEST

## 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
- Suitable for installation in the storage area of a clothes closet when specified at 4.0 watts or less per foot per NEC regulations

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
OP2SW			DRY										

Sample Part Number: **OP2SW-5.0-30-DRY-155D-P1-CON6-CON6-WH-CL2-CC-WH-48"-E**

<div><div>1</div><div>PRODUCT</div></div> <div><div>OP2SW</div><div>See following pages for compatible power supplies.</div></div>	<div><div>2</div><div>WATTS/FT</div></div> <div><div><div><div>1.5</div><div>1.5W/ft</div></div><div><div>3.0</div><div>3.0W/ft</div></div><div><div>4.0</div><div>4.0W/ft</div></div><div><div>5.0</div><div>5.0W/ft</div></div><div><div>1.5HE</div><div>1.5W/ft HE</div></div><div><div>3.0HE</div><div>3.0W/ft HE</div></div><div><div>6.0HE</div><div>6.0W/ft HE</div></div><div><div>9.0HE</div><div>9.0W/ft HE</div></div></div><div><div><div>3.0HE+</div><div>3.0W/ft HE+</div></div><div><div>6.0HE+</div><div>6.0W/ft HE+</div></div></div></div>	<div><div>3</div><div>CCT</div></div> <div><div><div><div>20</div><div>2000K</div></div><div><div>22</div><div>2200K</div></div><div><div>24</div><div>2400K</div></div><div><div>27</div><div>2700K</div></div><div><div>30</div><div>3000K</div></div><div><div>35</div><div>3500K</div></div><div><div>40</div><div>4000K</div></div></div><div><div><div>27</div><div>2700K</div></div><div><div>30</div><div>3000K</div></div><div><div>35</div><div>3500K</div></div><div><div>40</div><div>4000K</div></div></div></div>	<div><div>4</div><div>RATED</div></div> <div><div><div>DRY</div><div>IP20</div></div></div>		
<div><div>5</div><div>LENS</div></div> <div><div><div><div>40D</div><div>Optical 40°</div></div><div><div>60D</div><div>Optical 60°</div></div><div><div>70D</div><div>Optical 70°</div></div><div><div>90D</div><div>Optical 90°</div></div><div><div>110D</div><div>Optical 110°</div></div><div><div>155D</div><div>Optical 155°</div></div><div><div>180D</div><div>Optical 180°</div></div></div><div><div>ASYM</div><div>Asymmetric</div></div><div><div>FT</div><div>Forward Throw</div></div><div><div>For representation of LED visibility, see Diode Visibility section on following pages.</div><div>For beam angles, see Photometric Performance section on following pages</div></div></div>	<div><div>6</div><div>WIRE INPUT/OUTPUT</div></div> <div><div><div><div>S1</div><div>Single 1 (Input only) - End Feed</div></div><div><div>S2</div><div>Single 2 (Input only) - Bottom Feed</div></div></div><div><div>For continuous mounting, consider bottom feed.</div></div><div><div><div><div>P1</div><div>Pass Through 1 (Input/output) - End Feed</div></div><div><div>P2</div><div>Pass Through 2 (Input/output) - Bottom Feed</div></div></div><div><div>For continuous mounting, consider bottom feed.</div></div><div><div><div><div>S1A</div><div>Single 1 (Input only) - End Feed</div></div><div><div>S1B</div><div>Single 1 (Input only) - End Feed</div></div><div><div>S2A</div><div>Single 2 (Input only) - Bottom Feed</div></div><div><div>S2B</div><div>Single 2 (Input only) - Bottom Feed</div></div></div><div><div>For continuous mounting, consider bottom feed.</div></div><div><div><div><div>P1A</div><div>Pass Through 1 (Input/output) - End Feed</div></div><div><div>P1B</div><div>Pass Through 1 (Input/output) - End Feed</div></div><div><div>P2A</div><div>Pass Through 2 (Input/output) - Bottom Feed</div></div><div><div>P2B</div><div>Pass Through 2 (Input/output) - Bottom Feed</div></div></div><div><div>For continuous mounting, consider bottom feed.</div></div></div></div></div></div>	<div><div>7</div><div>CONNECTOR/WIRE IN</div></div> <div><div><div><div>BW</div><div>Bare Wire (Standard 36")</div></div><div><div>CON6</div><div>Connector 6"</div></div><div><div>CON24</div><div>Connector 24"</div></div></div><div><div>Connector/Wire In not needed to specify product. Typical selection is BW.</div><div>BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div></div><div><div><div><div>BW</div><div>Bare Wire (Standard 36")</div></div><div><div>CON6</div><div>Connector 6"</div></div><div><div>CON24</div><div>Connector 24"</div></div></div><div><div>Connector/Wire In not needed to specify product. Typical selection is BW.</div><div>BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div></div><div><div><div><div>BW</div><div>Bare Wire (Standard 36")</div></div><div><div>CON6</div><div>Connector 6"</div></div><div><div>CON24</div><div>Connector 24"</div></div></div><div><div>Connector/Wire In not needed to specify product. Typical selection is BW.</div><div>BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div></div></div></div></div>	<div><div>8</div><div>CONNECTOR/WIRE OUT</div></div> <div><div><div><div>CLS</div><div>Closed End (No feed)</div></div></div><div><div><div><div>BW</div><div>Bare Wire (Standard 36")</div></div><div><div>CON6</div><div>Connector 6"</div></div><div><div>CON24</div><div>Connector 24"</div></div></div><div><div>Connector/Wire Out not needed to specify product. Typical selection is CLS or BW.</div><div>BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div></div><div><div><div><div>CLS</div><div>Closed End (No feed)</div></div></div><div><div><div><div>BW</div><div>Bare Wire (Standard 36")</div></div><div><div>CON6</div><div>Connector 6"</div></div><div><div>CON24</div><div>Connector 24"</div></div></div><div><div>Connector/Wire Out not needed to specify product. Typical selection is CLS or BW.</div><div>BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div></div></div></div></div></div>		
<div><div>9</div><div>WIRE COLOR</div></div> <div><div><div>WH</div><div>White</div></div><div><div>BK</div><div>Black</div></div></div>	<div><div>10</div><div>WIRE TYPE</div></div> <div><div><div><div>CL2</div><div>Class 2</div></div><div><div>CL2P</div><div>Plenum Rated</div></div></div><div><div>CL2P only available with bare wire leads (BW)</div></div></div>	<div><div>11</div><div>MOUNTING</div></div> <div><div><div><div>CC</div><div>Concealed Clip</div></div><div><div>MG</div><div>Magnet</div></div></div></div>	<div><div>12</div><div>FINISH</div></div> <div><div><div><div>ST</div><div>Satin</div></div><div><div>BK</div><div>Black</div></div><div><div>WH</div><div>White</div></div><div><div>CU</div><div>Custom</div></div></div></div>	<div><div>13</div><div>LENGTH (IN)</div></div> <div><div><div>Fixture length min 12", max 98.43" not including end caps.</div><div>Tolerance +0 – 1/8". Consult factory for lengths under 12".</div><div>Max continuous length: 3.0HE+ - 196", 6.0HE+ - 118"</div></div></div>	<div><div>14</div><div>EXACT/OPTIMAL</div></div> <div><div><div><div>O</div><div>Optimal Illumination</div></div><div><div>E</div><div>Exact Specified Length</div></div></div><div><div>Exact fixtures are the exact length specified +0 – 1/8".</div><div>Optimal fixtures' length is rounded down with illumination end to end.</div><div>See Exact/Optimal Fixture Length charts.</div></div></div>

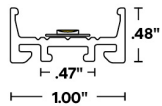
5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance



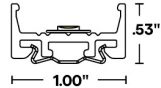
# TEST

## 24VDC Linear Fixtures - Surface & Recessed

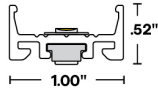
### 1 PRODUCT - DIMENSIONS



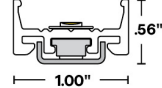
Profile



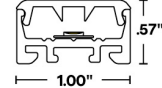
Profile with concealed clip



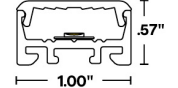
Profile with magnet clip



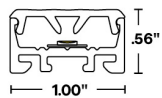
Profile with magnet mount clip and magnet mount accessory



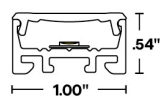
Profile with 40D lens



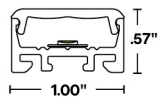
Profile with 60D lens



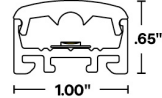
Profile with 70D lens



Profile with 90D lens



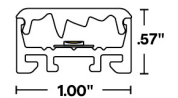
Profile with 110D lens



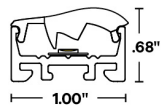
Profile with 155D lens



Profile with 180D lens



Profile with asymmetric lens



Profile with forward throw lens

### 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs, L70 = 66000 for HE, L70 = 55000 for HE+]  
Tested with OP2SW-\*\*-30-DRY-STD

	1.5 W/FT		1.5HE W/FT		3.0 W/FT		3.0HE W/FT		3.0HE+ W/FT		4.0 W/FT		5.0 W/FT		6.0HE W/FT		6.0HE+ W/FT		9.0HE W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
40D	156	98	179	98	281	98	338	98	561	92	331	98	415	98	692	98	764	92	906	98
60D	142	98	173	98	255	98	320	98	543	92	315	98	389	98	667	98	740	92	858	98
70D	149	98	175	98	262	98	333	98	528	92	321	98	402	98	682	98	733	92	888	98
90D	146	98	172	98	261	98	331	98	546	92	321	98	394	98	672	98	745	92	872	98
110D	142	98	161	98	249	98	306	98	534	92	308	98	372	98	603	98	730	92	835	98
155D	140	98	161	98	250	98	307	98	539	92	307	98	375	98	590	98	726	92	838	98
180D	143	98	167	98	251	98	307	98	537	92	310	98	378	98	607	98	733	92	844	98
ASYM	143	98	169	98	253	98	317	98	538	92	311	98	401	98	655	98	739	92	866	98
FT	122	98	154	98	225	98	305	98	419	92	270	98	331	98	576	98	664	92	820	98

### TEMPERATURE RATINGS

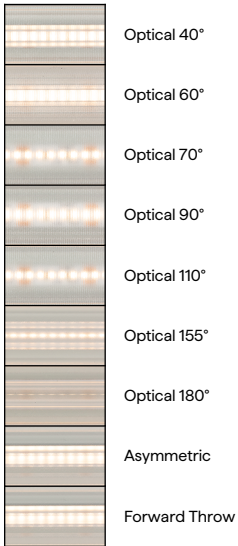
		1.5 W/FT		1.5 W/FT HE		3.0 W/FT		3.0 W/FT HE		3.0 W/FT HE+		4.0 W/FT		5.0 W/FT		6.0 W/FT HE		6.0 W/FT HE+		9.0 HE	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	140°F	-4°F	145°F	-4°F	135°F	-4°F	135°F	-13°F	135°F	-4°F	130°F	-4°F	125°F	-4°F	125°F	-13°F	125°F	-4°F	105°F



## TEST

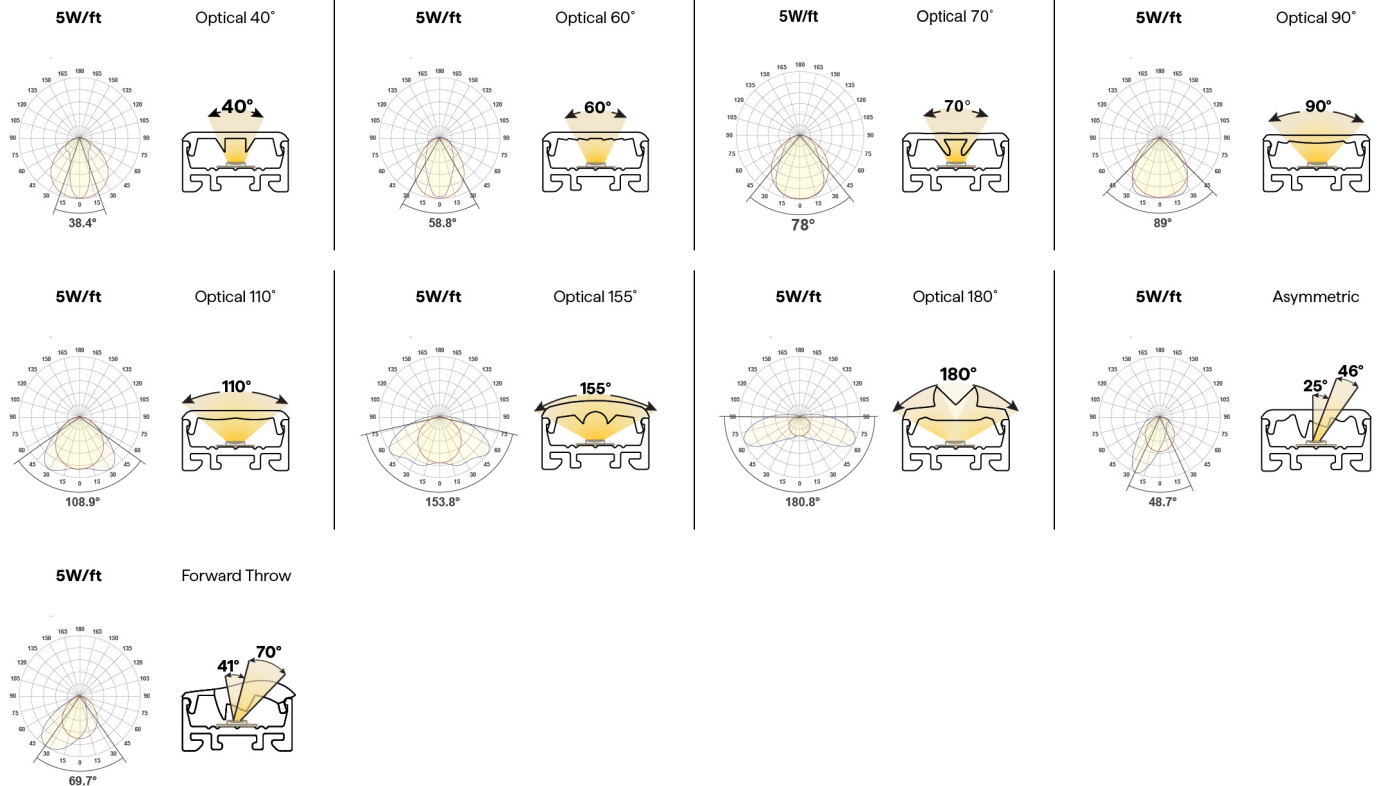
### 24VDC Linear Fixtures - Surface & Recessed

#### 5 DIODE VISIBILITY



## PHOTOMETRIC PERFORMANCE

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



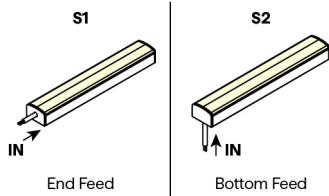


# TEST

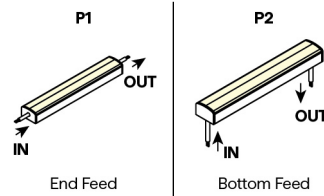
## 24VDC Linear Fixtures - Surface & Recessed

### 6 WIRE INPUT/OUTPUT

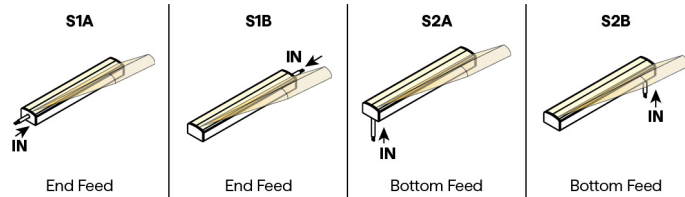
SINGLE (Input only)



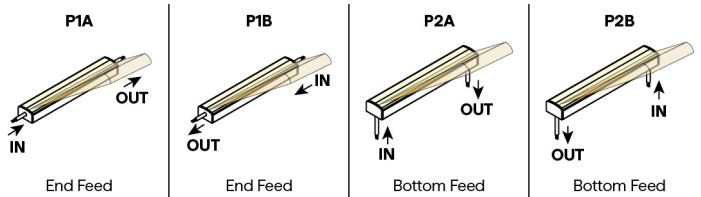
PASS THROUGH (Input/Output)



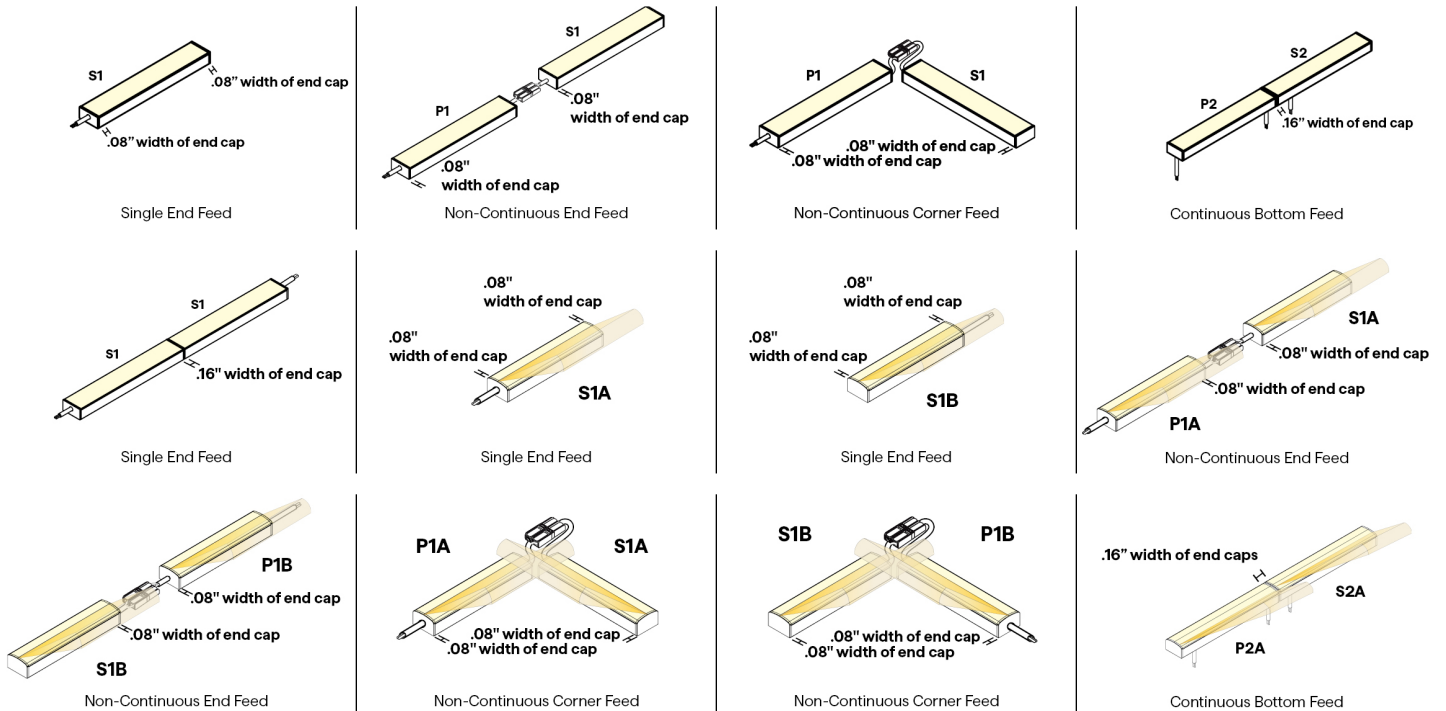
ASYMMETRIC ONLY SINGLE (Input only)



ASYMMETRIC ONLY PASS THROUGH (Input/Output)



### CONFIGURATION OPTIONS

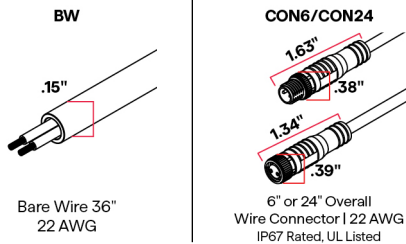




# TEST

## 24VDC Linear Fixtures - Surface & Recessed

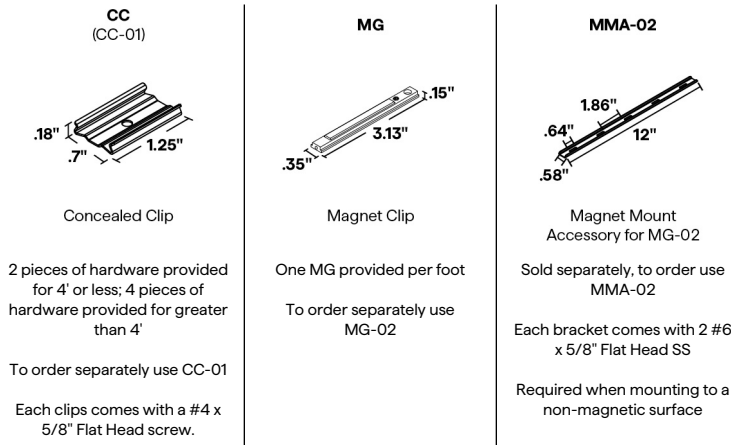
### 7 / 8 CONNECTOR/WIRE - IN/OUT



### 9 WIRE COLOR



### 11 MOUNTING



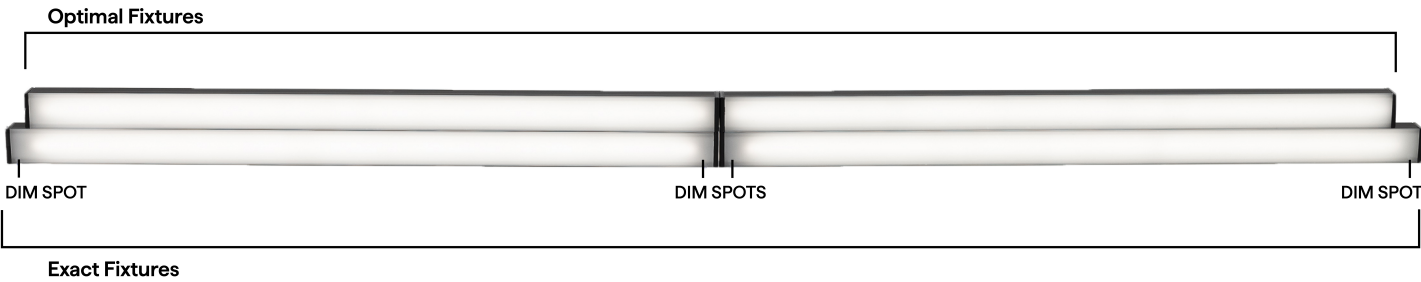
### 12 FINISH



Custom color available

### 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.





# TEST

## 24VDC Linear Fixtures - Surface & Recessed

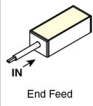
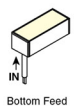
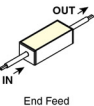
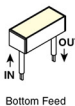
### SW DRY LENGTHS BY INCH

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 fixture
12"	.5"
13"	.5"
14"	.5"
15"	.5"
16"	.5"
17"	.5"
18"	.5"
19"	.5"
20"	.5"
21"	.5"
22"	.5"
23"	.5"
24"	.5"
36"	.5"
48"	.5"
60"	.5"
72"	.5"
84"	.5"
96"	.5"

#### OPTIMAL LENGTH

Requested Nominal Length	S1 & S1A/B & S2 & S2A/B		P1 & P1A/B & P2 & P2A/B	
	S1  End Feed	S2  Bottom Feed	P1  End Feed	P2  Bottom Feed
12"	11.5"		11.75"	
13"	12.5"		12.75"	
14"	13.5"		13.75"	
15"	14.5"		14.75"	
16"	15.5"		15.75"	
17"	16.5"		16.75"	
18"	17.5"		17.75"	
19"	18.5"		18.75"	
20"	19.5"		19.75"	
21"	20.5"		20.75"	
22"	21.5"		21.75"	
23"	22.5"		22.75"	
24"	23.5"		23.75"	
36"	35.5"		35.75"	
48"	47.5"		47.75"	
60"	59.5"		59.75"	
72"	71.5"		71.75"	
84"	83.5"		83.75"	
96"	95.5"		95.75"	

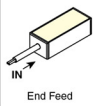
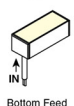
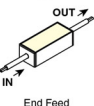
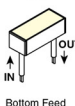
### SW-HE, SW-HE+ DRY LENGTHS BY INCH

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 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 & S1A/B & S2 & S2A/B		P1 & P1A/B & P2 & P2A/B	
	S1  End Feed	S2  Bottom Feed	P1  End Feed	P2  Bottom Feed
12"	10.5"		10.75"	
13"	12.5"		12.75"	
14"	12.5"		12.75"	
15"	14.5"		14.75"	
16"	14.5"		14.75"	
17"	16.5"		16.75"	
18"	16.5"		16.75"	
19"	18.5"		18.75"	
20"	18.5"		18.75"	
21"	20.5"		20.75"	
22"	20.5"		20.75"	
23"	22.5"		22.75"	
24"	22.5"		22.75"	
36"	34.5"		34.75"	
48"	46.5"		46.75"	
60"	58.5"		58.75"	
72"	70.5"		70.75"	
84"	82.5"		82.75"	
96"	94.5"		94.75"	



TEST

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	
	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+
Dim to Black	Q6M-DC+CAP QTM-DC+CAP iQ-PH iQ-PH+QD1	Q6M-DC+CAP QTM-DC+CAP iQ-PH iQ-PH+QD1
0.1%	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED(E) QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED(E) QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6
10%	Non-Dim Power Supply with SW App Dongle	Non-Dim Power Supply with SW App Dongle




TEST

24VDC Linear Fixtures - Surface & Recessed

DIMMING PROTOCOL	INDOOR	
	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+
Non-Dim	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND
Phase	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH iQ-PH+QD1	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH iQ-PH+QD1
0-10V	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
Lutron Athena	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN
ECO System	QTM-eLED(E)	QTM-eLED(E)
DMX	QZ-DMX	QZ-DMX
DALI-2: DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-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
SCENE App Dimmed	Non-Dim Power Supply with SW App Dongle	Non-Dim Power Supply with SW App Dongle

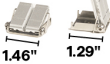
COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M




Adjustable mounting bracket - Medium

HINGE - HMB-L




Adjustable mounting bracket - Large

HINGE - HMB-XL




Adjustable mounting bracket - XLarge

Q-PIVOT



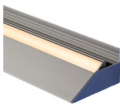
Small mounting accessory

Q-ANGLE




Adjustable mounting accessory

QUOVA-STANDARD




QUOVA Knife Edge

NJ-LARGE




J Mounting Bracket

NU-LARGE



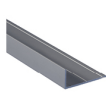
U Mounting Bracket

SD-J-LARGE




J Mounting Bracket

BL-LARGE




Backwards L Mounting Bracket

NL-LARGE



L Mounting Bracket

SD-L-LARGE



L Mounting Bracket





# TEST

## 24VDC Linear Fixtures - Surface & Recessed

### COMPATIBLE WIRING ACCESSORIES

<p><b>Q-mini-J</b></p>  <p>1.25" x 2"</p> <p>UL Listed, miniature junction box, DRY/DMP (WET rated with silicone)</p>	<p><b>Q-mini-J5</b></p>  <p>2.27" x 2.80"</p> <p>UL Listed, miniature junction box, DRY/DMP (WET rated with silicone)</p>	<p><b>CON120-EXT</b></p>  <p>10ft Con cable extender DRY/DMP/WET</p>	<p><b>CON FOUR-FER</b></p>  <p>Splits lead from one to four LED Con connectors DRY/DMP/WET</p>	<p><b>CON M - BARREL F</b></p>  <p>Male con to barrel cable adaptor DRY/DMP</p>
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### COMPATIBLE CONTROL ACCESSORIES

**SCENE APP DONGLE**



1.36" x 2.58"

Wi-Fi or Bluetooth Connectivity

### COMPATIBLE APPS

**SCENE APP**



Create and control scenes and automations