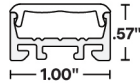
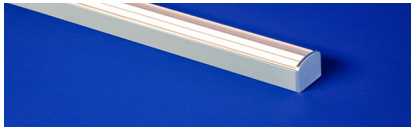




# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed



- Versatile surface and recessed mount linear LED fixture with an advanced assortment of optics
- Choose from nine lens options for varying diode visibility and beam angles
- Easy installation with options for concealed or magnet clip
- Durable anodized aluminum housings
- 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 where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled
- Consult factory for field assembly options

| 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 |
| OP2DW   |           |     | DRY   |      |                    |                    |                     |            |           |          |        |             |                |

Sample Part Number: **OP2DW-2.5HE-20/30-DRY-155D-P1-CON6-CON6-WH-CL2-CC-WH-48"-E**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>1</div><div>PRODUCT</div></div> <div>OP2DW</div> <div>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.</div>                                                                                                                                                                                                                                                                                                                                                                                                         | <div><div>2</div><div>WATTS/FT</div></div> <div><div>1.5HE</div><div>1.5W/ft HE</div></div> <div><div>2.5HE</div><div>2.5W/ft HE</div></div> <div><div>4.0HE</div><div>4.0W/ft HE</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <div><div>3</div><div>CCT</div></div> <div><div>20/27</div><div>2000K/2700K</div></div> <div><div>20/30</div><div>2000K/3000K</div></div> <div><div>27/40</div><div>2700K/4000K</div></div> <div><div>27/55</div><div>2700K/5500K</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <div><div>4</div><div>RATED</div></div> <div><div>DRY</div><div>IP20</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                      |
| <div><div>5</div><div>LENS</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>ASYM</div><div>Asymmetric</div></div> <div><div>FT</div><div>Forward Throw</div></div> <div>For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages</div> | <div><div>6</div><div>WIRE INPUT/OUTPUT</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>For continuous mounting, consider bottom feed.</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>For continuous mounting, consider bottom feed.</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>For continuous mounting, consider bottom feed.</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>For continuous mounting, consider bottom feed.</div> | <div><div>7</div><div>CONNECTOR/WIRE IN</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>Connector/Wire In not needed to specify product. Typical selection is BW. 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>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>Connector/Wire In not needed to specify product. Typical selection is BW. 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>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>Connector/Wire In not needed to specify product. Typical selection is BW. 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>8</div><div>CONNECTOR/WIRE OUT</div></div> <div><div>CLS</div><div>Closed End (No feed)</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>Connector/Wire Out not needed to specify product. Typical selection is CLS or BW. 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>CLS</div><div>Closed End (No feed)</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>Connector/Wire Out not needed to specify product. Typical selection is CLS or BW. 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>9</div><div>WIRE COLOR</div></div> <div><div>WH</div><div>White</div></div> <div><div>BK</div><div>Black</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div><div>10</div><div>WIRE TYPE</div></div> <div><div>CL2</div><div>Class 2</div></div> <div><div>CL2P</div><div>Plenum Rated</div></div> <div>CL2P only available with bare wire leads (BW)</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <div><div>11</div><div>MOUNTING</div></div> <div><div>CC</div><div>Concealed Clip</div></div> <div><div>MG</div><div>Magnet</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <div><div>12</div><div>FINISH</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>13</div><div>LENGTH (IN)</div></div> <div>Fixture length min 12", max 98.43" not including end caps. Tolerance +0 – 1/8". Consult factory for lengths under 12".</div> | <div><div>14</div><div>EXACT/OPTIMAL</div></div> <div><div>O</div><div>Optimal Illumination</div></div> <div><div>E</div><div>Exact Specified Length</div></div> <div>Exact fixtures are the exact length specified +0 – 1/8". Optimal fixtures' length is rounded down with illumination end to end. See Exact/Optimal Fixture Length charts.</div> |

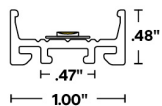
5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance



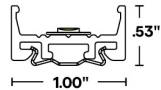
# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

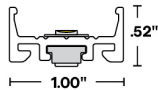
## 1 PRODUCT - DIMENSIONS



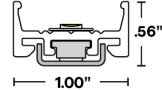
Profile



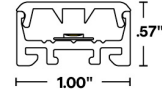
Profile with concealed clip



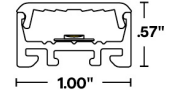
Profile with magnet clip



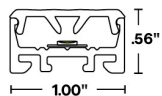
Profile with magnet mount clip and magnet mount accessory



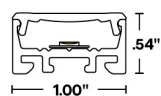
Profile with 40D lens



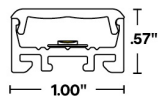
Profile with 60D lens



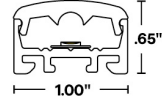
Profile with 70D lens



Profile with 90D lens



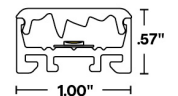
Profile with 110D lens



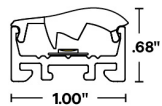
Profile with 155D lens



Profile with 180D lens



Profile with asymmetric lens



Profile with forward throw lens

## 2 DELIVERED LUMENS

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

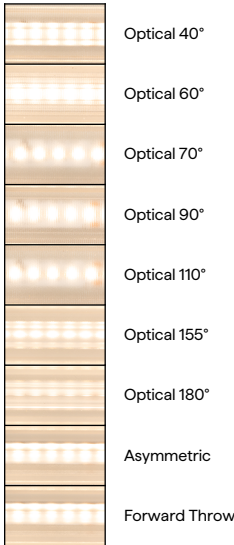
|      | 3000K |     |
|------|-------|-----|
|      | LM/FT | CRI |
| 40D  | 262   | 98  |
| 60D  | 246   | 98  |
| 70D  | 251   | 98  |
| 90D  | 249   | 98  |
| 110D | 240   | 98  |
| 155D | 243   | 98  |
| 180D | 245   | 98  |
| ASYM | 245   | 98  |
| FT   | 213   | 98  |



# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

## 5 DIODE VISIBILITY

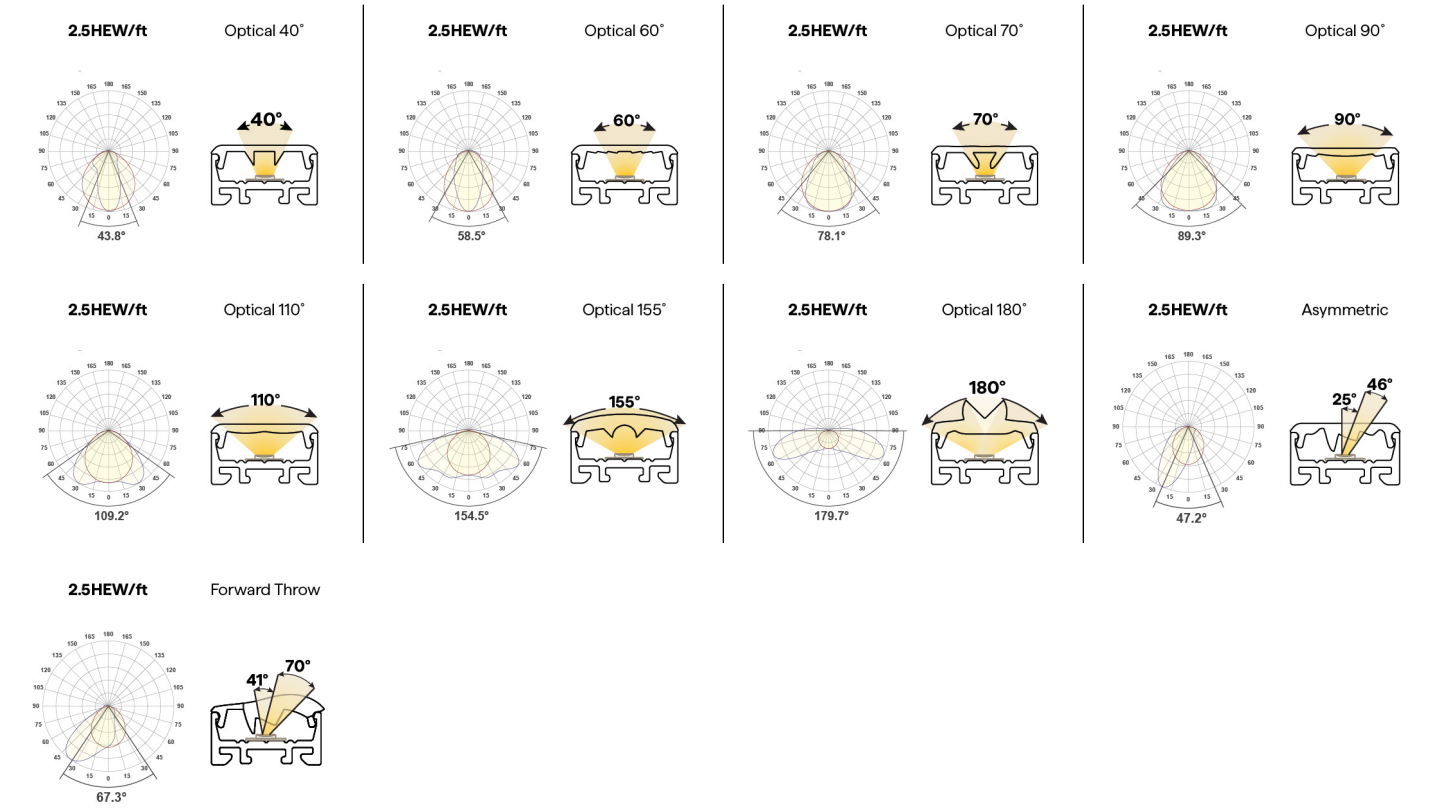


## TEMPERATURE RATINGS

| Ambient Operating Temp - Surface |                                  | 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   |
| DRY                              | Ambient Operating Temp - Surface | -4°F                                     | 145°F | -4°F                                  | 135°F | -4°F                                     | 140°F | -4°F                                  | 125°F | -4°F                                     | 130°F | -4°F                                  | 115°F |

## PHOTOMETRIC PERFORMANCE

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



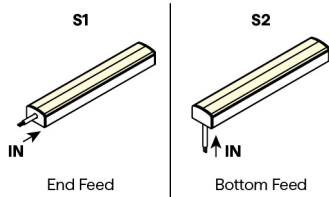


# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

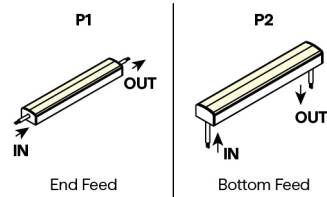
24VDC Linear Fixtures - Surface & Recessed

## 6 WIRE INPUT/OUTPUT

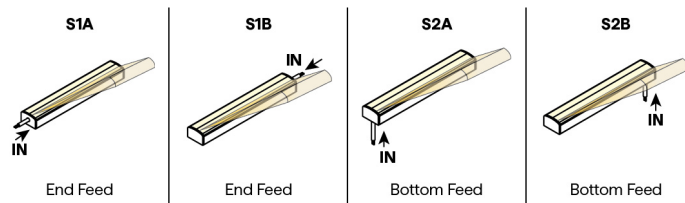
SINGLE (Input only)



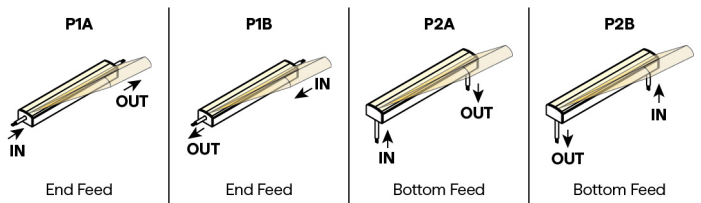
PASS THROUGH (Input/Output)



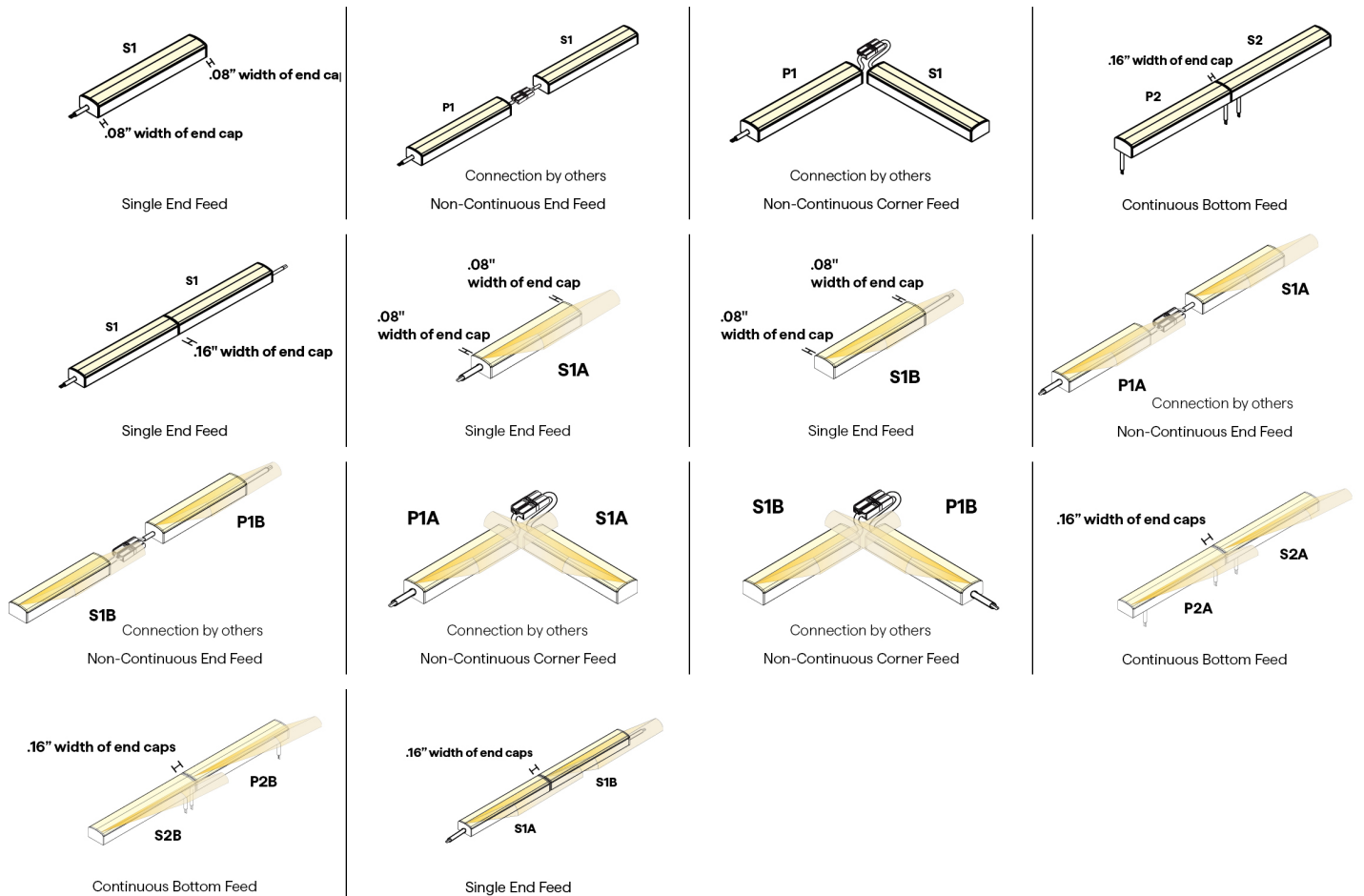
ASYMMETRIC ONLY SINGLE (Input only)



ASYMMETRIC ONLY PASS THROUGH (Input/Output)



## CONFIGURATION OPTIONS

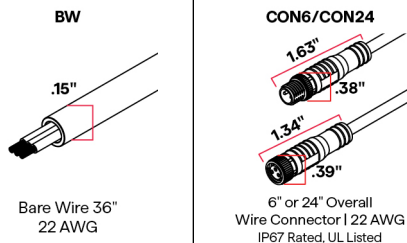




# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

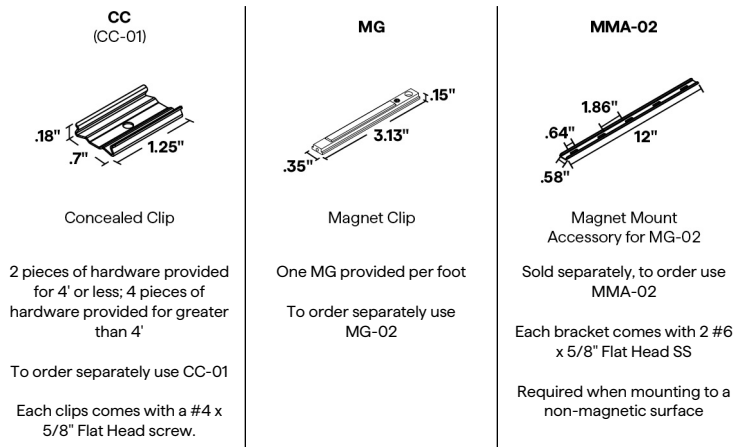
### 7 / 8 CONNECTOR/WIRE – IN/OUT



### 9 WIRE COLOR



### 11 MOUNTING



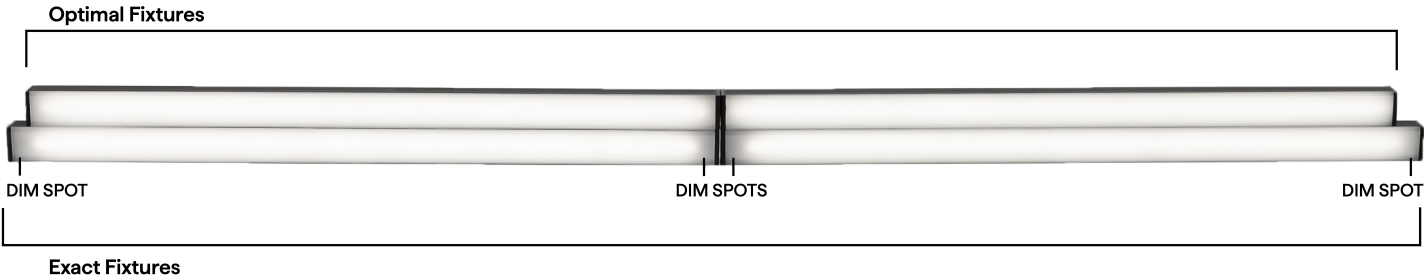
### 12 FINISH



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.





# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

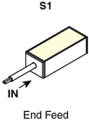
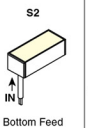
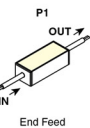
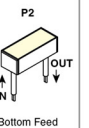
### DW-HE DRY LENGTHS BY INCH

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 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                                                           |                                                                                    |
|--------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                          |  |  |  |  |
| 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"                                                                            |                                                                                    |

### 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 Tunable Applications                                                                                                                                                                                                      |
| 0.1%         | QT-CAB-eLED+DALI-DT6<br>QT-CAB-eLED+DALI-DT8<br>QT-CAB-eLED+DALI-DT8-AWN<br>QT-CAB-eLED+TW<br>QT-CAB-eLED+TW-AWN<br>QTM-eLED+DALI-DT6<br>QTM-eLED+DALI-DT8<br>QTM-eLED+DALI-DT8-AWN<br>QTM-eLED+TW<br>QTM-eLED+TW-AWN<br>QZ-DMX |
| 1%           | QZ-DALI-DT8                                                                                                                                                                                                                     |
| 10%          | Non-Dim Power Supply with TW App Dongle                                                                                                                                                                                         |



# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed

| DIMMING PROTOCOL                                                             | INDOOR                                                                                                        |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|                                                                              | DW-HE Tunable Applications                                                                                    |
| 0-10V                                                                        | QT-CAB-eLED+TW<br>QT-CAB-eLED+TW-AWN<br>QTM-eLED+TW<br>QTM-eLED+TW-AWN                                        |
| Lutron Athena                                                                | QT-CAB-eLED+DALI-DT8-AWN<br>QT-CAB-eLED+TW-AWN<br>QTM-eLED+DALI-DT8-AWN<br>QTM-eLED+TW-AWN                    |
| DMX<br>LED wattage must be doubled for DW-HE products                        | QZ-DMX                                                                                                        |
| DALI-2: DT6<br>LED wattage must be doubled for DW-HE products except for AWN | QT-CAB-eLED+DALI-DT6<br>QTM-eLED+DALI-DT6                                                                     |
| DALI-2: DT8<br>LED wattage must be doubled for DW-HE products except for AWN | QT-CAB-eLED+DALI-DT8<br>QT-CAB-eLED+DALI-DT8-AWN<br>QTM-eLED+DALI-DT8<br>QTM-eLED+DALI-DT8-AWN<br>QZ-DALI-DT8 |
| SCENE App Dimmed                                                             | Non-Dim Power Supply with TW 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

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

### COMPATIBLE WIRING ACCESSORIES

Q-mini-J5

2.80" 2.27"

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

CON120-EXT

10ft Con cable extender DRY/DMP/WET



# OPTI-OPTICS (02) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

---

## COMPATIBLE CONTROL ACCESSORIES

### SCENE APP DONGLE



Wi-Fi or Bluetooth  
Connectivity

## COMPATIBLE APPS

### NFC APP



Read and write  
DMX addresses and  
adjust voltage