# eW Fuse Powercore

## Precision Dimming

DMX-dimmable linear interior LED wall grazing fixture with solid white light

PHILIPS

COLOR KINETICS

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## Precision Dimming

## DMX-dimmable linear interior LED wall grazing fixture with solid white light

With narrow and medium beams of intense white light, eW Fuse Powercore is an excellent choice for a full range of surface grazing and wall-washing applications. Its ultra-compact form factor permits installation in tight spaces too small to accommodate conventional grazing fixtures with similar light output. eW Fuse Powercore with Precision Dimming offers precise dimming from 0 to 100% via the full range of DMX and Ethernet lighting controllers. eW Fuse Powercore offers environmentally-conscious buyers a green, energy-efficient grazing fixture with industry-leading quality and quantity of light.

- Precise dimming control via DMX — Dim fixtures smoothly and accurately from 0% to 100% with the full range of Philips Color Kinetics lighting controllers. including iPlayer 3, and third-party controllers.
- Lower cost than comparable fluorescent grazing fixtures — With long useful life and low-maintenance operation, eW Fuse Powercore meets or exceeds the performance of comparable linear fluorescent grazing fixtures while lowering installation, energy, and maintenance costs.
- High-performance illumination and beam quality — eW Fuse Powercore is available in 1 ft (305 mm) and 4 ft (1.2 m) die-cast aluminum housings with a narrow 10° x 60° or medium 30° x 60° beam angle. Superior beam quality delivers striation-free light as close as 6 in (152 mm) from fixture placement. Interlocking connectors accommodate end-to-end connection without visible light scalloping between fixtures.
- Multiple color temperature options for design and application flexibility — Available in 2700 K, 3000 K, 3500 K, and 4000 K color temperatures for applications calling for warm, neutral, or cool white light.
- Integrates patented Powercore technology — Powercore rapidly, efficiently, and accurately controls power directly from line voltage, eliminating the need for an external power supply. Contractor-friendly installation dramatically simplifies installation and lowers total system cost.
- Support for multiple voltages — Accepts power input of 100 – 240 VAC for consistent installation and operation from line voltage in a variety of locations.
- Simple installation — Powercore integrated power management technology simplifies installation and allows long product runs. Easy-to-install 4 ft (1.2 m) mounting tracks allow quick project setup in linear applications.
- Easy mounting and positioning — With end-to-end locking power connectors that can make 180° turns, eW Fuse Powercore fixtures are easy to position in even the most challenging mounting circumstances. Fixtures rotate in 10° increments through 180° for precise aiming and color mixing. Optional mounting tracks support vertical and overhead positioning. 1 ft (305 mm) and 5 ft (1.5 m) jumper cables can add extra space between fixtures.

**Superior Binning Algorithm sets new standard for color consistency**

eW Fuse Powercore exceeds the recognized standards for color quality to guarantee uniformity and consistency of hue and color temperature across LEDs, fixtures, and manufacturing runs.

# Setting New Standards for Color Consistency

Achieving consistency of color temperature and hue in linear white lighting applications is one of the most difficult challenges facing lighting designers and installers. Wall-grazing applications can be challenging, as light sources must be positioned very close to the illuminated surfaces with little room for color mixing. Viewed from a distance, even small variations in color temperature and hue are clearly visible.

Linear fluorescent light sources are fairly uniform, but lighting applications that use them can suffer from socket shadowing — areas of low luminance toward the ends of the fluorescent tubes — and hot spots, creating an uneven distribution of light along the illuminated surfaces. Fluorescent fixtures at the same nominal color temperature are also known to vary greatly in hue from manufacturer to manufacturer.

Linear LED lighting fixtures pose their own challenges to consistency and uniformity of light distribution. The beam produced by a linear LED lighting fixture is a series of adjacent point sources, each with a certain degree of hue and color temperature variation. Unless these variations are tightly managed, unwanted tiger-striping can result.

eW Fuse Powercore incorporates an improved version of the proprietary Optibin binning algorithm used in the entire range of new white-light LED cove and wall-grazing fixtures from Philips Color Kinetics. Optibin's advanced bin selection formula sets new standards for color consistency and uniformity across LEDs. Optibin allows significantly smaller variations in color temperature (CCT) and hue (Duv) than ANSI Chromaticity Standard C78.377A, ensuring virtually imperceptible differences in output from LED to LED and fixture to fixture.

The result? eW Fuse Powercore delivers extremely uniform and consistent color in linear applications, with no socket shadowing, hot spots, color shifting, tiger-striping, or unwanted edge effects. eW Fuse Powercore offers quality of light as good as if not better than comparable fluorescent fixtures — while also offering superior energy efficiency and an average useful life 10 to 20 times longer than the rated life of many fluorescent sources.

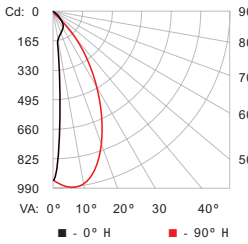
# Photometrics

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

## eW Fuse Powercore with Precision Dimming 1 ft, 2700 K, 10° x 60° beam angle

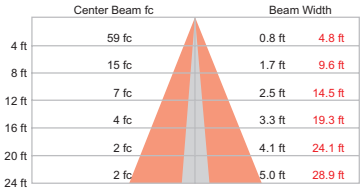
| | |
|---|---|
| Lumens | 482 |
| Efficacy | 30.9 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 947 | 947 | 947 | 947 | 947 |
| 5 | 578 | 624 | 752 | 908 | 979 |
| 15 | 158 | 161 | 192 | 455 | 915 |
| 25 | 132 | 128 | 125 | 194 | 682 |
| 35 | 109 | 100 | 93 | 111 | 379 |
| 45 | 103 | 85 | 68 | 44 | 76 |
| 55 | 59 | 51 | 37 | 22 | 29 |
| 65 | 35 | 29 | 19 | 14 | 17 |
| 75 | 22 | 18 | 11 | 8 | 7 |
| 85 | 9 | 8 | 5 | 3 | 1 |
| 90 | 6 | 6 | 3 | 2 | 0 |

### Illuminance at Distance




30.8 ft (9.4 m)
1 fc maximum distance

Vert. Spread: 11.8°
Horiz. Spread: 62.2°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 258 | 53.5 |
| 0- 40 | 340 | 70.6 |
| 0- 60 | 430 | 89.3 |
| 0- 90 | 472 | 97.8 |
| 90-120 | 8 | 1.6 |
| 90-130 | 9 | 1.9 |
| 90-150 | 11 | 2.2 |
| 90-180 | 11 | 2.2 |
| 0-180 | 482 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

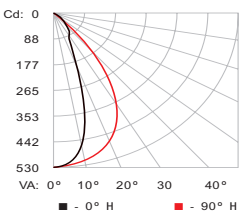
Effective Floor Cavity Reflectance: 20%

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 111 | 108 | 104 | 101 | 108 | 105 | 102 | 100 | 101 | 98 | 96 | 96 | 95 | 93 | 93 | 91 | 90 | 88 |
| 2 | 104 | 98 | 93 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 83 | 81 | 79 |
| 3 | 97 | 90 | 83 | 79 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 82 | 78 | 75 | 79 | 76 | 73 | 71 |
| 4 | 92 | 82 | 76 | 71 | 89 | 81 | 75 | 70 | 79 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 65 |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 69 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 62 | 60 |
| 6 | 81 | 71 | 64 | 59 | 80 | 70 | 63 | 59 | 68 | 62 | 58 | 66 | 61 | 58 | 65 | 60 | 57 | 55 |
| 7 | 77 | 66 | 59 | 55 | 75 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 61 | 56 | 53 | 51 |
| 8 | 73 | 62 | 55 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 |
| 9 | 69 | 59 | 52 | 48 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 |
| 10 | 66 | 55 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 |

## eW Fuse Powercore with Precision Dimming 1 ft, 2700 K, 30° x 60° beam angle

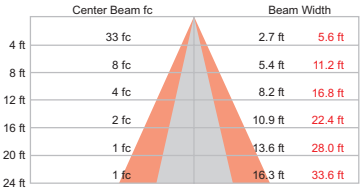
| | |
|---|---|
| Lumens | 492 |
| Efficacy | 31.7 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 526 | 526 | 526 | 526 | 526 |
| 5 | 514 | 515 | 519 | 522 | 523 |
| 15 | 342 | 364 | 416 | 475 | 493 |
| 25 | 153 | 171 | 243 | 366 | 404 |
| 35 | 89 | 85 | 108 | 197 | 279 |
| 45 | 54 | 58 | 56 | 59 | 74 |
| 55 | 34 | 30 | 31 | 22 | 26 |
| 65 | 26 | 22 | 16 | 13 | 15 |
| 75 | 15 | 13 | 9 | 7 | 7 |
| 85 | 7 | 6 | 4 | 3 | 2 |
| 90 | 6 | 5 | 3 | 2 | 1 |

### Illuminance at Distance




22.9 ft (7.0 m)
1 fc maximum distance

Vert. Spread: 37.6°
Horiz. Spread: 70.1°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 285 | 58.0 |
| 0- 40 | 375 | 76.2 |
| 0- 60 | 449 | 91.2 |
| 0- 90 | 482 | 98.0 |
| 90-120 | 7 | 1.4 |
| 90-130 | 8 | 1.7 |
| 90-150 | 10 | 2.0 |
| 90-180 | 10 | 2.0 |
| 0-180 | 492 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

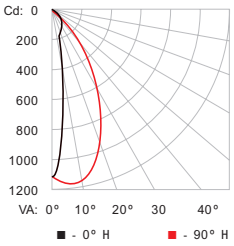
| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 93 | 92 | 91 | 89 |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 93 | 90 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 83 | 80 | 76 | 81 | 78 | 75 | 73 |
| 4 | 93 | 84 | 77 | 72 | 91 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 73 | 70 | 75 | 72 | 69 | 67 |
| 5 | 87 | 78 | 71 | 66 | 85 | 77 | 70 | 66 | 74 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 63 | 62 |
| 6 | 82 | 72 | 66 | 61 | 81 | 71 | 65 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | 66 | 62 | 59 | 57 |
| 7 | 78 | 68 | 61 | 56 | 76 | 67 | 60 | 56 | 65 | 60 | 55 | 64 | 59 | 55 | 62 | 58 | 55 | 53 |
| 8 | 74 | 63 | 57 | 52 | 72 | 63 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 59 | 54 | 51 | 49 |
| 9 | 70 | 60 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 46 |
| 10 | 67 | 56 | 50 | 46 | 66 | 56 | 50 | 46 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 43 |

For lux multiply fc by 10.7

## eW Fuse Powercore with Precision Dimming 1 ft, 3000 K, 10° x 60° beam angle

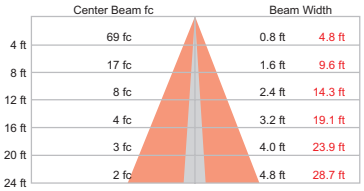
| | |
|---|---|
| Lumens | 556 |
| Efficacy | 35.4 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 1106 | 1106 | 1106 | 1106 | 1106 |
| 5 | 650 | 714 | 874 | 1069 | 1152 |
| 15 | 186 | 190 | 223 | 518 | 1072 |
| 25 | 152 | 146 | 146 | 220 | 797 |
| 35 | 123 | 115 | 107 | 127 | 434 |
| 45 | 105 | 90 | 78 | 52 | 92 |
| 55 | 66 | 57 | 43 | 26 | 34 |
| 65 | 40 | 34 | 22 | 16 | 20 |
| 75 | 25 | 21 | 12 | 9 | 8 |
| 85 | 10 | 9 | 6 | 3 | 2 |
| 90 | 7 | 7 | 4 | 2 | 1 |

### Illuminance at Distance




33.3 ft (10.1 m)
1 fc maximum distance

Vert. Spread: 11.5°
Horiz. Spread: 61.7°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 298 | 53.6 |
| 0- 40 | 393 | 70.7 |
| 0- 60 | 495 | 89.0 |
| 0- 90 | 543 | 97.6 |
| 90-120 | 9 | 1.7 |
| 90-130 | 11 | 2.0 |
| 90-150 | 13 | 2.4 |
| 90-180 | 13 | 2.4 |
| 0-180 | 556 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

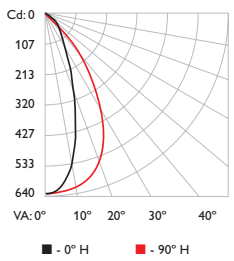
Effective Floor Cavity Reflectance: 20%

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 100 | 100 | 98 | 96 | 96 | 94 | 93 | 92 | 91 | 90 | 88 |
| 2 | 104 | 98 | 93 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 85 | 83 | 81 | 79 |
| 3 | 97 | 90 | 83 | 79 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 82 | 78 | 75 | 79 | 76 | 73 | 71 |
| 4 | 92 | 82 | 76 | 71 | 89 | 81 | 75 | 70 | 79 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 65 |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 69 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 62 | 60 |
| 6 | 81 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 68 | 62 | 58 | 66 | 61 | 58 | 65 | 60 | 57 | 55 |
| 7 | 77 | 66 | 59 | 55 | 75 | 66 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 61 | 57 | 53 | 51 |
| 8 | 73 | 62 | 56 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 |
| 9 | 69 | 59 | 52 | 48 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 |
| 10 | 66 | 55 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 |

## eW Fuse Powercore with Precision Dimming 1 ft, 3000 K, 30° x 60° beam angle

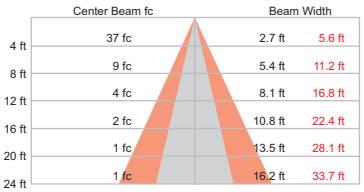
| | |
|---|---|
| Lumens | 548 |
| Efficacy | 35.4 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 589 | 589 | 589 | 589 | 589 |
| 5 | 574 | 577 | 581 | 584 | 584 |
| 15 | 375 | 395 | 469 | 534 | 553 |
| 25 | 170 | 188 | 267 | 403 | 456 |
| 35 | 99 | 95 | 120 | 217 | 312 |
| 45 | 58 | 64 | 63 | 65 | 81 |
| 55 | 38 | 34 | 35 | 26 | 29 |
| 65 | 30 | 25 | 18 | 15 | 18 |
| 75 | 17 | 14 | 10 | 8 | 8 |
| 85 | 8 | 7 | 5 | 3 | 1 |
| 90 | 6 | 5 | 3 | 2 | 0 |

### Illuminance at Distance




24.3 ft (7.4 m)
1 fc maximum distance

Vert. Spread: 37.2°
Horiz. Spread: 70.1°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 317 | 57.9 |
| 0- 40 | 417 | 76.0 |
| 0- 60 | 500 | 91.2 |
| 0- 90 | 538 | 98.1 |
| 90-120 | 8 | 1.4 |
| 90-130 | 9 | 1.7 |
| 90-150 | 11 | 1.9 |
| 90-180 | 11 | 1.9 |
| 0-180 | 548 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

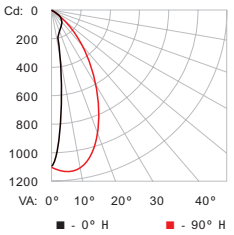
| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 93 | 92 | 91 | 89 |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 93 | 90 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 83 | 80 | 76 | 81 | 78 | 75 | 73 |
| 4 | 93 | 84 | 77 | 72 | 90 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 73 | 70 | 75 | 72 | 69 | 67 |
| 5 | 87 | 78 | 71 | 66 | 85 | 77 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 71 | 67 | 63 | 62 |
| 6 | 82 | 72 | 65 | 61 | 81 | 71 | 65 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | 66 | 62 | 59 | 57 |
| 7 | 78 | 68 | 61 | 56 | 76 | 67 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 62 | 58 | 54 | 53 |
| 8 | 74 | 63 | 57 | 52 | 72 | 63 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 59 | 54 | 51 | 49 |
| 9 | 70 | 60 | 53 | 49 | 69 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 46 |
| 10 | 67 | 56 | 50 | 46 | 66 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 43 |

For lux multiply fc by 10.7

## eW Fuse Powercore with Precision Dimming 1 ft, 3500 K, 10° x 60° beam angle

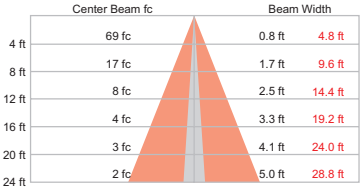
| | |
|---|---|
| Lumens | 562 |
| Efficacy | 36.3 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 1106 | 1106 | 1106 | 1106 | 1106 |
| 5 | 665 | 723 | 874 | 1059 | 1139 |
| 15 | 193 | 195 | 226 | 526 | 1061 |
| 25 | 152 | 146 | 150 | 225 | 790 |
| 35 | 126 | 115 | 107 | 131 | 434 |
| 45 | 116 | 101 | 78 | 51 | 86 |
| 55 | 67 | 58 | 42 | 26 | 34 |
| 65 | 40 | 33 | 22 | 16 | 20 |
| 75 | 26 | 21 | 12 | 9 | 9 |
| 85 | 11 | 10 | 6 | 4 | 2 |
| 90 | 8 | 7 | 5 | 2 | 1 |

### Illuminance at Distance




33.3 ft (10.1 m)
1 fc maximum distance

Vert. Spread: 11.8°
Horiz. Spread: 62.0°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 300 | 53.3 |
| 0- 40 | 396 | 70.4 |
| 0- 60 | 500 | 88.9 |
| 0- 90 | 548 | 97.5 |
| 90-120 | 10 | 1.8 |
| 90-130 | 12 | 2.2 |
| 90-150 | 14 | 2.5 |
| 90-180 | 14 | 2.5 |
| 0-180 | 562 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

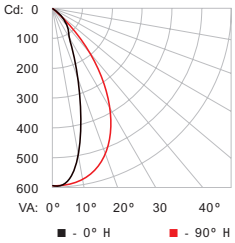
Effective Floor Cavity Reflectance: 20%

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 97 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 100 | 98 | 96 | 96 | 94 | 93 | 92 | 91 | 89 | 87 |
| 2 | 104 | 98 | 93 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 85 | 83 | 85 | 83 | 80 | 79 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 71 |
| 4 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 70 | 78 | 73 | 69 | 76 | 71 | 68 | 74 | 70 | 67 | 65 |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 69 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 61 | 60 |
| 6 | 81 | 71 | 64 | 59 | 79 | 70 | 63 | 59 | 68 | 62 | 58 | 66 | 61 | 57 | 65 | 60 | 57 | 55 |
| 7 | 77 | 66 | 59 | 55 | 75 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 61 | 56 | 53 | 51 |
| 8 | 73 | 62 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 |
| 9 | 69 | 59 | 52 | 47 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 45 |
| 10 | 66 | 55 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 |

## eW Fuse Powercore with Precision Dimming 1 ft, 3500 K, 30° x 60° beam angle

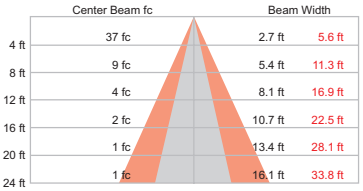
| | |
|---|---|
| Lumens | 554 |
| Efficacy | 35.5 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 594 | 594 | 594 | 594 | 594 |
| 5 | 580 | 582 | 586 | 590 | 590 |
| 15 | 374 | 399 | 471 | 539 | 558 |
| 25 | 171 | 188 | 267 | 406 | 460 |
| 35 | 100 | 96 | 120 | 220 | 317 |
| 45 | 61 | 65 | 64 | 67 | 83 |
| 55 | 39 | 34 | 36 | 26 | 29 |
| 65 | 30 | 26 | 18 | 15 | 18 |
| 75 | 18 | 15 | 10 | 8 | 8 |
| 85 | 8 | 7 | 5 | 3 | 1 |
| 90 | 6 | 5 | 3 | 2 | 0 |

### Illuminance at Distance




24.4 ft (7.4 m)
1 fc maximum distance

Vert. Spread: 37.1°
Horiz. Spread: 70.2°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 320 | 57.7 |
| 0- 40 | 420 | 75.8 |
| 0- 60 | 505 | 91.1 |
| 0- 90 | 543 | 98.0 |
| 90-120 | 8 | 1.5 |
| 90-130 | 10 | 1.8 |
| 90-150 | 11 | 2.0 |
| 90-180 | 11 | 2.0 |
| 0-180 | 554 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

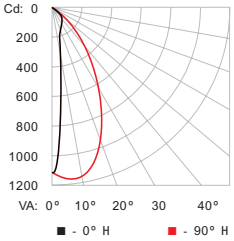
| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 93 | 92 | 91 | 89 |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 81 | 78 | 83 | 79 | 76 | 81 | 77 | 75 | 73 |
| 4 | 93 | 84 | 77 | 72 | 90 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 73 | 70 | 75 | 72 | 69 | 67 |
| 5 | 87 | 78 | 71 | 66 | 85 | 76 | 70 | 65 | 74 | 69 | 65 | 72 | 68 | 64 | 71 | 66 | 63 | 61 |
| 6 | 82 | 72 | 65 | 61 | 81 | 71 | 65 | 60 | 69 | 64 | 60 | 68 | 63 | 59 | 66 | 62 | 58 | 57 |
| 7 | 78 | 67 | 61 | 56 | 76 | 67 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 62 | 58 | 54 | 53 |
| 8 | 74 | 63 | 57 | 52 | 72 | 63 | 56 | 52 | 61 | 56 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 |
| 9 | 70 | 59 | 53 | 49 | 69 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 51 | 48 | 56 | 51 | 48 | 46 |
| 10 | 67 | 56 | 50 | 45 | 65 | 56 | 49 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 43 |

For lux multiply fc by 10.7

## eW Fuse Powercore with Precision Dimming 1 ft, 4000 K, 10° x 60° beam angle

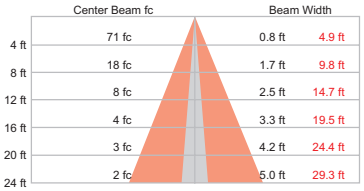
| | |
|---|---|
| Lumens | 588 |
| Efficacy | 37.9 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 1128 | 1128 | 1128 | 1128 | 1128 |
| 5 | 692 | 748 | 901 | 1087 | 1164 |
| 15 | 192 | 197 | 232 | 544 | 1093 |
| 25 | 162 | 156 | 151 | 232 | 827 |
| 35 | 133 | 124 | 115 | 134 | 464 |
| 45 | 116 | 99 | 85 | 54 | 94 |
| 55 | 72 | 64 | 46 | 27 | 35 |
| 65 | 42 | 35 | 24 | 17 | 21 |
| 75 | 27 | 21 | 13 | 10 | 9 |
| 85 | 11 | 10 | 6 | 4 | 2 |
| 90 | 8 | 8 | 4 | 2 | 1 |

### Illuminance at Distance




33.6 ft (10.2 m)
1 fc maximum distance

Vert. Spread: 11.9°
Horiz. Spread: 62.8°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 310 | 52.8 |
| 0- 40 | 412 | 70.1 |
| 0- 60 | 522 | 88.9 |
| 0- 90 | 573 | 97.5 |
| 90-120 | 10 | 1.7 |
| 90-130 | 12 | 2.1 |
| 90-150 | 14 | 2.4 |
| 90-180 | 14 | 2.5 |
| 0-180 | 588 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

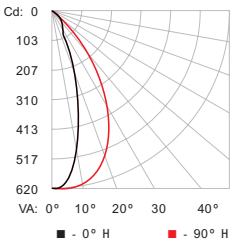
Effective Floor Cavity Reflectance: 20%

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 100 | 98 | 96 | 96 | 94 | 93 | 92 | 91 | 89 | 87 |
| 2 | 104 | 98 | 93 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 88 | 85 | 83 | 85 | 83 | 80 | 78 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 71 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 75 | 70 | 78 | 73 | 69 | 76 | 71 | 68 | 74 | 70 | 66 | 65 |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 68 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 61 | 59 |
| 6 | 81 | 71 | 64 | 59 | 79 | 70 | 63 | 58 | 68 | 62 | 58 | 66 | 61 | 57 | 64 | 60 | 57 | 55 |
| 7 | 77 | 66 | 59 | 54 | 75 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 61 | 56 | 53 | 51 |
| 8 | 73 | 62 | 55 | 50 | 71 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 53 | 49 | 57 | 53 | 49 | 48 |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 46 | 54 | 50 | 46 | 45 |
| 10 | 66 | 55 | 49 | 44 | 65 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 52 | 47 | 43 | 42 |

## eW Fuse Powercore with Precision Dimming 1 ft, 4000 K, 30° x 60° beam angle

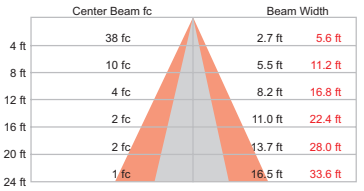
| | |
|---|---|
| Lumens | 588 |
| Efficacy | 37.5 |

### Polar Candela Distribution




| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|---|---|---|---|---|---|
| 0 | 611 | 611 | 611 | 611 | 611 |
| 5 | 598 | 600 | 604 | 606 | 608 |
| 15 | 400 | 424 | 499 | 560 | 578 |
| 25 | 185 | 206 | 287 | 425 | 475 |
| 35 | 100 | 101 | 131 | 235 | 321 |
| 45 | 64 | 68 | 68 | 78 | 96 |
| 55 | 42 | 39 | 39 | 30 | 34 |
| 65 | 32 | 28 | 21 | 18 | 20 |
| 75 | 18 | 16 | 11 | 9 | 8 |
| 85 | 8 | 7 | 5 | 4 | 2 |
| 90 | 6 | 6 | 4 | 2 | 0 |

### Illuminance at Distance




24.7 ft (7.5 m)
1 fc maximum distance

Vert. Spread: 37.9°
Horiz. Spread: 70.0°

### Zonal Lumen

| ZONE | LUMENS | %FIXT |
|---|---|---|
| 0- 30 | 336 | 57.2 |
| 0- 40 | 442 | 75.2 |
| 0- 60 | 534 | 90.8 |
| 0- 90 | 577 | 98.0 |
| 90-120 | 8 | 1.4 |
| 90-130 | 10 | 1.7 |
| 90-150 | 11 | 2.0 |
| 90-180 | 12 | 2.0 |
| 0-180 | 588 | 100.0 |

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 93 | 92 | 90 | 88 |
| 2 | 105 | 99 | 94 | 89 | 102 | 97 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 98 | 90 | 84 | 80 | 96 | 89 | 83 | 79 | 86 | 81 | 77 | 83 | 79 | 76 | 80 | 77 | 74 | 73 |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 74 | 70 | 77 | 73 | 69 | 75 | 71 | 68 | 66 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 67 | 64 | 70 | 66 | 63 | 61 |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 60 | 69 | 63 | 59 | 67 | 62 | 59 | 66 | 61 | 58 | 56 |
| 7 | 78 | 67 | 60 | 56 | 76 | 66 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 52 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 54 | 51 | 58 | 54 | 50 | 49 |
| 9 | 70 | 59 | 53 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 55 | 51 | 47 | 46 |
| 10 | 66 | 56 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 44 | 52 | 48 | 44 | 43 |

For lux multiply fc by 10.7

# Specifications

Due to continuous improvements and innovations, specifications may change without notice.

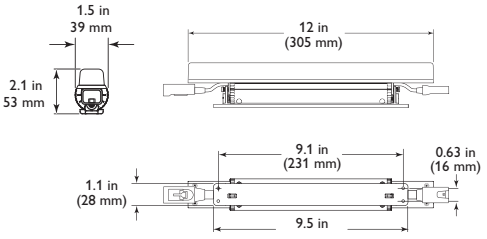
| CCT* | Beam Angle | Lumens† | | Efficacy (lm / W) | CRI |
|---|---|---|---|---|---|
| | | 1 ft (305 mm) | 4 ft (1.2 m) | | |
| 2700 K | 10° x 60° | 482 | 1928 | 30.9 | 82 |
| | 30° x 60° | 492 | 1968 | 31.7 | 81 |
| 3000 K | 10° x 60° | 556 | 2224 | 35.4 | 83 |
| | 30° x 60° | 548 | 2192 | 35.4 | 83 |
| 3500 K | 10° x 60° | 562 | 2248 | 36.3 | 84 |
| | 30° x 60° | 554 | 2216 | 35.5 | 84 |
| 4000 K | 10° x 60° | 588 | 2352 | 37.9 | 81 |
| | 30° x 60° | 588 | 2352 | 37.5 | 81 |

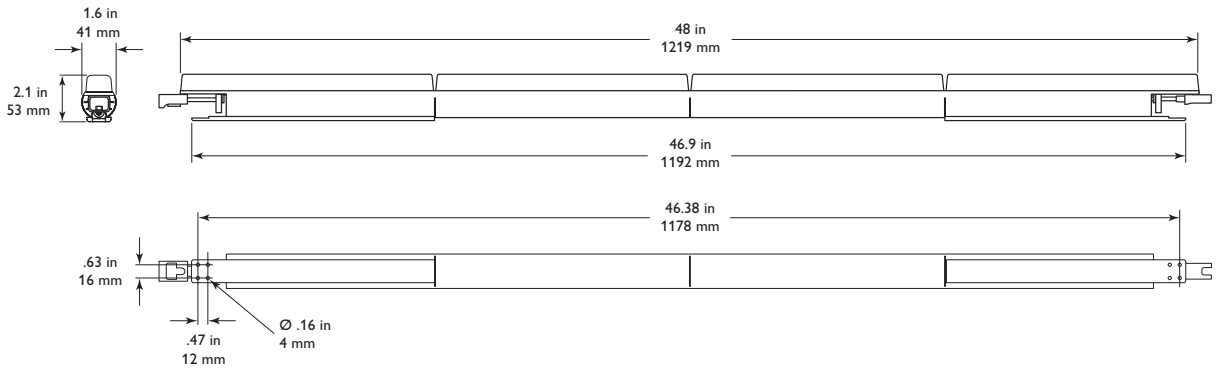
| Item | Specification | 1 ft (305 mm) | 4 ft (1.2 m) |
|---|---|---|---|
| Output | Lumen Maintenance‡ | 50,000 hours $L_{70}$ @ 25° C<br>90,000 hours $L_{50}$ @ 25° C | 37,000 hours $L_{70}$ @ 50° C<br>80,000 hours $L_{50}$ @ 50° C |
| Electrical | Input Voltage | 100 – 240 VAC, auto-switching, 50 / 60 Hz | |
| | Power Consumption | 13 W maximum at full output, steady state | 52 W maximum at full output, steady state |
| Control | Interface | Data Enabler Pro (DMX or Ethernet) | |
| | Control System | Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers | |
| Physical | Dimensions *(Height x Width x Depth)* | 2.1 x 12 x 1.5 in<br>(53 x 305 x 38 mm) | 2.1 x 48 x 1.6 in<br>(53 x 1219 x 41 mm) |
| | Weight | 0.98 lbs (.45 kg) | 4.37 lbs (1.98 kg) |
| | Housing | Die-cast aluminium, white powder-coated finish | |
| | Lens | Polycarbonate | |
| | Fixture Connections | Integral male / female connectors | |
| | Temperature | -40° – 122° F (-40° – 50° C) Operating<br>-4° – 122° F (-20° – 50° C) Startup<br>-40° – 176° F (-40° – 80° C) Storage | |
| | Humidity | 0 – 95%, non-condensing | |
| | Fixture Run Lengths | To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/ | |
| Certification and Safety | Certification | UL / cUL, CE, C-Tick, SAA, CCC, PSE | |
| | Environment | Dry / Damp Location, IP20 | |

* Color temperatures conform to nominal CCTs as defined in ANSI Chromaticity Standard C78.377A.

† 1 ft (305 mm) lumen output measurements comply with IES LM-79-08 testing procedures. 4 ft (1.2 m) measurements are estimated based on the 1 ft (305 mm) measurements.

‡ $L_{70}$ = 70% lumen maintenance (when light output drops below 70% of initial output). $L_{50}$ = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.



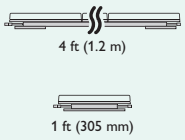
# Product Selection

To order eW Fuse Powercore with Precision Dimming, choose a color temperature, a fixture length, a beam angle, and any extra options you may need.

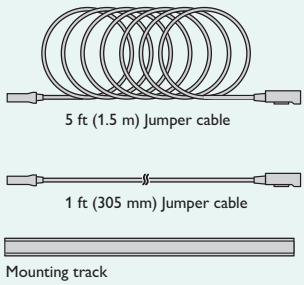
**1** Choose color temperature


**2** Choose beam angle


**3** Choose fixture length




**4** Choose extra options




## Fixtures

| Type | Color Temperature | Beam Angle | Item Number | Philips 12NC |
|---|---|---|---|---|
| eW Fuse Powercore with Precision Dimming 1 ft (305 mm) | 2700 K | 10° x 60° | 523-000076-00 | 910503702716 |
| | | 30° x 60° | 523-000076-04 | 910503702720 |
| | 3000 K | 10° x 60° | 523-000076-01 | 910503702717 |
| | | 30° x 60° | 523-000076-05 | 910503702721 |
| | 3500 K | 10° x 60° | 523-000076-02 | 910503702718 |
| | | 30° x 60° | 523-000076-06 | 910503702722 |
| | 4000 K | 10° x 60° | 523-000076-03 | 910503702719 |
| | | 30° x 60° | 523-000076-07 | 910503702723 |
| eW Fuse Powercore with Precision Dimming 4 ft (1.2 m) | 2700 K | 10° x 60° | 523-000076-08 | 910503702724 |
| | | 30° x 60° | 523-000076-12 | 910503702728 |
| | 3000 K | 10° x 60° | 523-000076-09 | 910503702725 |
| | | 30° x 60° | 523-000076-13 | 910503702729 |
| | 3500 K | 10° x 60° | 523-000076-10 | 910503702726 |
| | | 30° x 60° | 523-000076-14 | 910503702730 |
| | 4000 K | 10° x 60° | 523-000076-11 | 910503702727 |
| | | 30° x 60° | 523-000076-15 | 910503702731 |

## Accessories

| Item | Type | | Item Number | Philips 12NC |
|---|---|---|---|---|
| Mounting Track, White | 1 @ 4 ft (1219 mm) | | 120-000124-00 | 910503701787 |
| Leader Cable with Terminator | 10 ft (3.1 m) | UL / cUL | 108-000050-00 | 910503701686 |
| | | CE / CCC | 108-000050-01 | 910503701687 |
| Jumper Cable | 1 ft (305 mm) | UL / cUL | 108-000049-01 | 910503701683 |
| | | CE / CCC | 108-000049-03 | 910503701685 |
| | 5 ft (1.5 m) | UL / cUL | 108-000049-00 | 910503701682 |
| | | CE / CCC | 108-000049-02 | 910503701684 |
| Wiring Compartment with Terminator | | UL / cUL | 120-000077-02 | 910503701740 |
| Terminator, Quantity 10 | | | 120-000058-00 | 910503700146 |
| Data Enabler Pro | 3/4 in / 1/2 in NPT (U.S. trade size conduit) | | 106-000004-00 | 910503701210 |
| | PG21 / PG13 (metric size conduit) | | 106-000004-01 | 910503701211 |

Use Item Number when ordering in North America.

# Installation

eW Fuse Powercore with Precision Dimming is a high-intensity surface grazing and wall washing fixture that can be dimmed from 0% – 100% using DMX or Ethernet lighting controllers. Powercore technology integrates LED power and data management within the fixture, eases installation by eliminating the need for external power supplies.

### Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate eW Fuse Powercore with Precision Dimming fixtures in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

*Refer to the eW Fuse Powercore with Precision Dimming Installation Instructions for specific warning and caution statements.*

# Prepare for the Installation

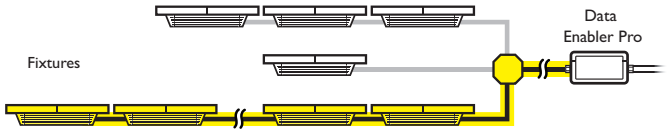
Determine the appropriate location of each Data Enabler Pro in relation to the fixtures, and of the fixtures in relation to each other. The Data Enabler Pro and first fixture must be separated by no more than the 10 ft (3.1 m) length of the Leader Cable.

*Refer to the Data Enabler Pro Installation Instructions or Product Guide for guidelines on configuring and positioning the Data Enabler Pro in relation to the controller.*

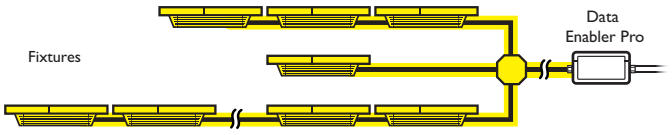
eW Fuse Powercore fixtures are installed in series. The in-line connectors allow end-to-end fixture connections for the best visual effects. Joined directly together, the connectors on the 1 ft (305 mm) fixtures allow for spacing of .4 in (10 mm) to .9 in (23 mm) without a jumper cable, while the connectors on the 4 ft (1.2 m) fixtures allow for spacing of .9 in (23 mm) to 2 in (51 mm) without a jumper cable. When you need to separate fixtures by more than these minimums, use the 1 ft (305 mm) or 5 ft (1.5 m) jumper cables.

The maximum number of fixtures each Data Enabler Pro can support depends on specific configuration details such as fixture length, fixture spacing, circuit size, line voltage, and cable lengths. For help calculating the number of fixtures your specific installation can support, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.

In addition to maximum fixture run lengths determined by the electrical configuration, each Data Enabler Pro imposes maximum run lengths based on data integrity. To ensure data integrity, maximum individual run lengths should not exceed 175 ft (53.3 m), and the total cable length per Data Enabler Pro should not exceed 400 ft (122 m).

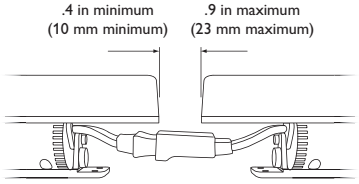



Data Integrity — maximum individual length 175 ft (53.3 m)

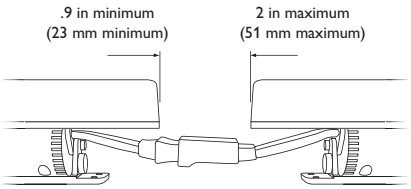



Data Integrity — total length 400 ft (122 m)

### Distance between fixtures joined end-to-end



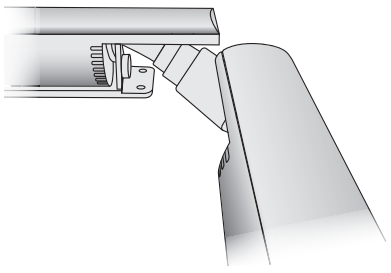

1 ft (305 mm) fixtures




4 ft (1.2 m) fixtures

### Easy turns

End-to-end locking power connectors can make turns of up to 180° without jumper cables.



## Start the Installation

1. Install all Data Enabler Pro devices, including any interfaces with controllers. One Leader Cable is required to connect each run or series of fixtures to a Data Enabler Pro. The Data Enabler Pro sends power and control signals to the fixtures over the Leader Cable.
2. Verify that all additional supporting equipment (switches, controllers) is in place.
3. If your installation calls for Jumper Cables to add space between fixtures, make sure they are available.
4. Ensure that all additional parts (optional mounting tracks, mounting hardware, terminators) and tools are available.

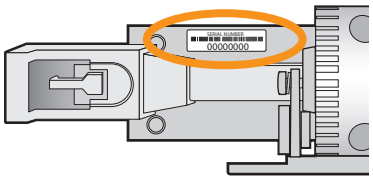
## Unpack and Prepare Fixtures

### Included in the box

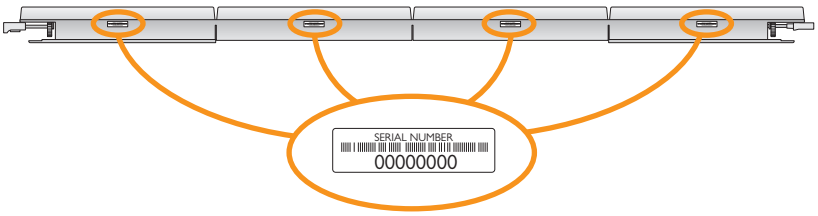
| |
|---|
| eW Fuse Powercore with Precision Dimming fixture |
| Installation Instructions |

1. Carefully inspect the box containing eW Fuse Powercore with Precision Dimming and the contents for any damage that may have occurred in transit.
2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, power supplies, fixtures, Leader Cables, and Jumper Cables.
3. eW Fuse Powercore with Precision Dimming fixtures are addressable in 1 ft (305 mm) segments, or nodes. Each fixture node comes pre-programmed with a unique serial number and a default start DMX address of 1. For lighting designs in which all eW Fuse Powercore with Precision Dimming fixtures work in unison, you do not need to change the fixtures' default DMX addresses.

   You can create dynamic black and white effects by giving each fixture node a unique DMX address, so that playback controllers can send unique light output data to each segment of each fixture within your installation. Fixtures have one or four serial numbers depending on fixture length. As you unpack the fixtures, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.




Location of serial number on 1 ft (305 mm) eW Fuse Powercore with Precision Dimming fixtures

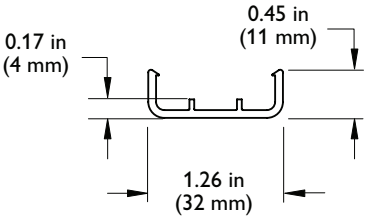



Location of serial numbers on 4 ft (1.2 m) eW Fuse Powercore with Precision Dimming fixtures

4. Assign each fixture to a position in the lighting design plan.
5. To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each fixture's housing.

# Install the Fixtures

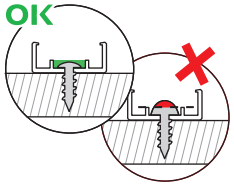
You can mount eW Fuse Powercore fixtures directly to a wall, ceiling, cabinet, or other secure surface. For linear applications, you can install several eW Fuse Powercore fixtures in optional 4 ft (1.2 m) lengths of mounting track to ensure straight runs.




## (Optional) Install Mounting Tracks

1. Field-cut the mounting tracks to the desired length with hacksaws or tin snips.
2. Install the mounting tracks using hardware suitable for the mounting surface.

   To ensure proper fixture fit, hardware must not extend above the track standoffs after installation. The recommended maximum spacing between screws is 12 in (305 mm).




*You can use the fixture base as a template when pre-drilled holes are required. Hold the fixture in place and mark the four screw holes.*

## Mount and Connect the Fixtures

Make sure the power is OFF before mounting and connecting fixtures.

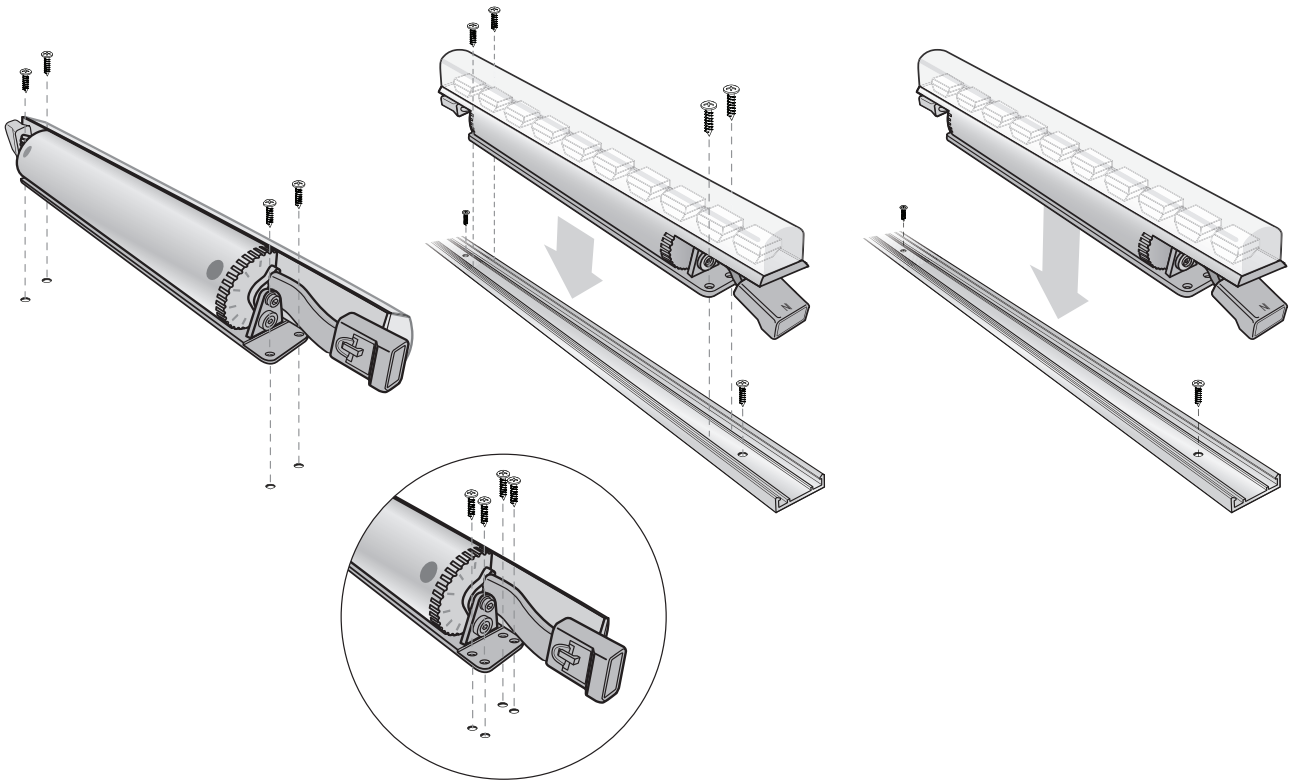
1. Rotate an eW Fuse Powercore fixture as necessary to provide unobstructed access to the mounting holes.
2. Position the first fixture in a series.

   If using mounting tracks on a horizontal surface, snap the fixture into the track.

   If using mounting tracks on vertical or overhead surfaces, or if not using mounting tracks, attach 1 ft (305 mm) fixtures with four #6 (3.5 mm) mounting screws each (not included) suitable for the mounting surface. Attach 4 ft (1.2 m) fixtures with eight #6 (3.5 mm) mounting screws suitable for the mounting surface, four at each end of the fixture,

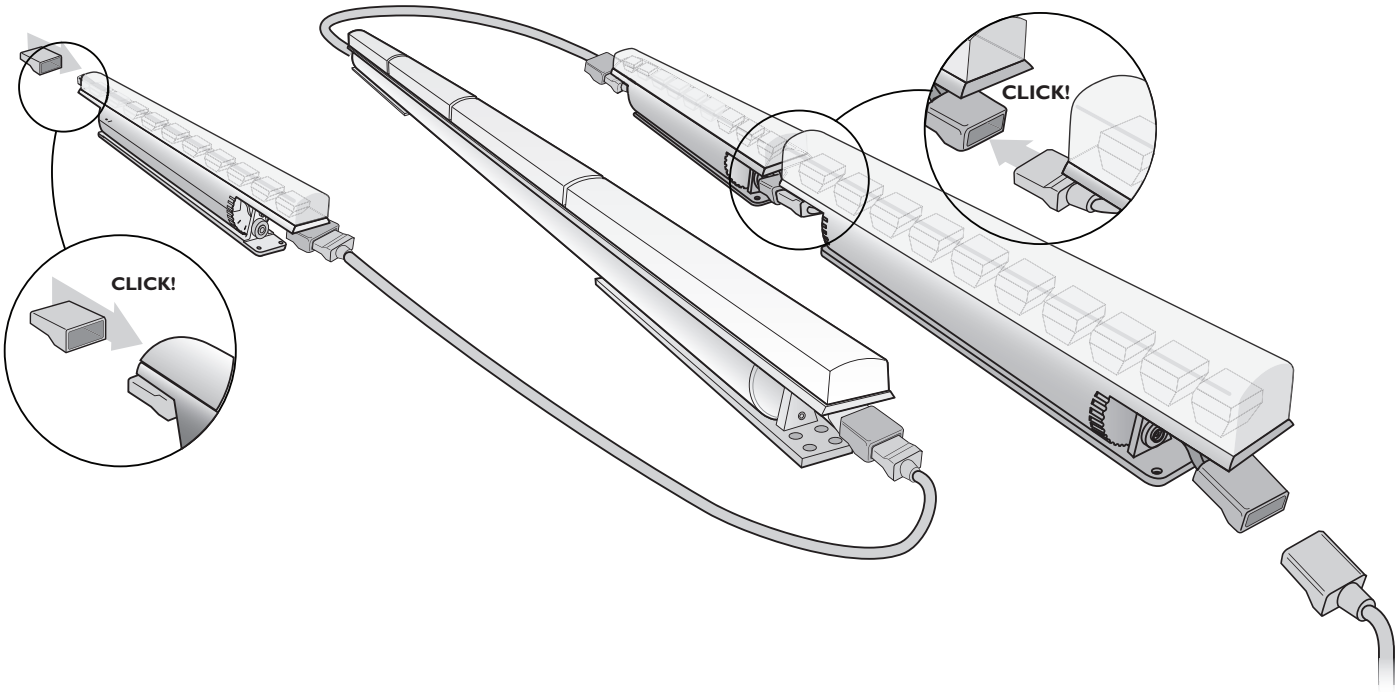
   Ensure that the male connector is in position to receive data and power from the leader cable's female connector.

*If using the Wiring Compartment to run conduit from Data Enabler Pro to the first fixture in a run, make sure you leave enough space at the beginning of the run to accommodate the Wiring Compartment.*



Mounting 4 ft (1.2 m) fixtures

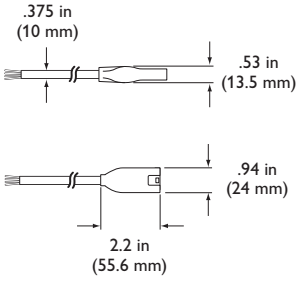
3. Position the next fixture in the series, matching the male connector end to the female connector of the previously mounted fixture. Attach the fixture to the surface or snap it into the track.
4. Continue mounting the fixtures, making power / data connections as you go, until all lights in the series are mounted.
5. Insert the provided terminator into the last fixture in the series.

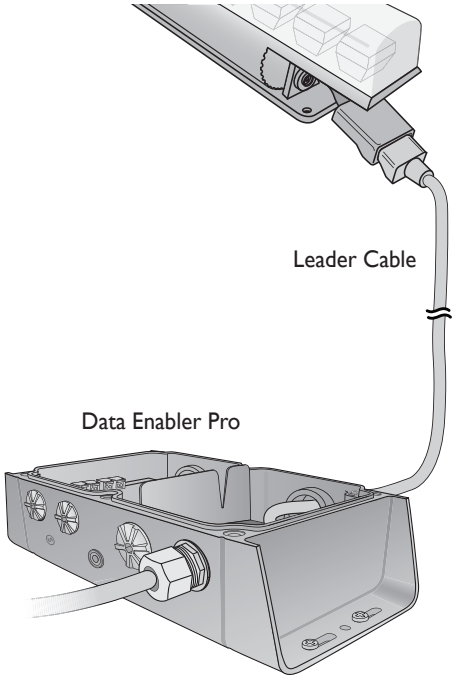



## Make Power Connections

1. If using a Leader Cable, connect the Leader Cable to the first fixture in the series. Run the Leader Cable to the Data Enabler Pro.

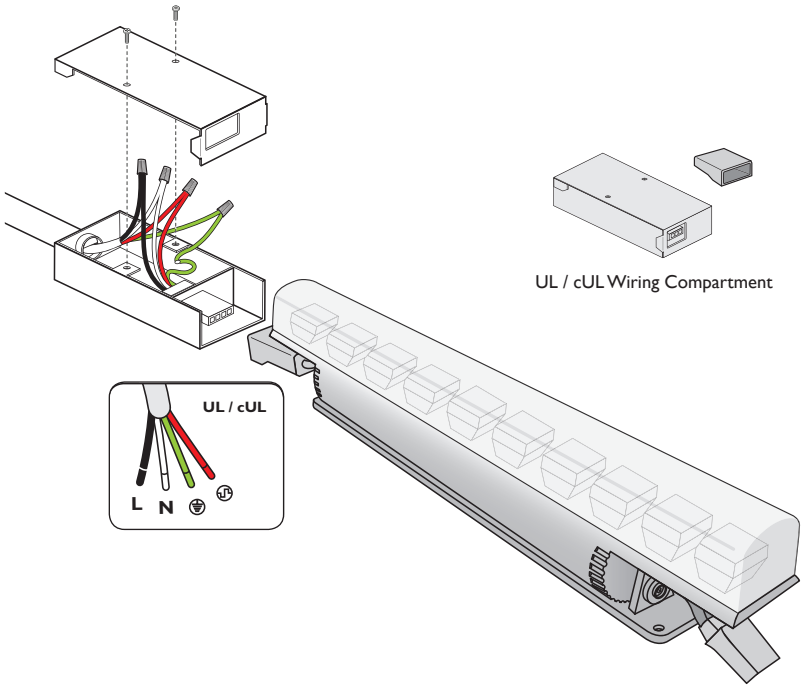
### Leader Cable connector dimensions



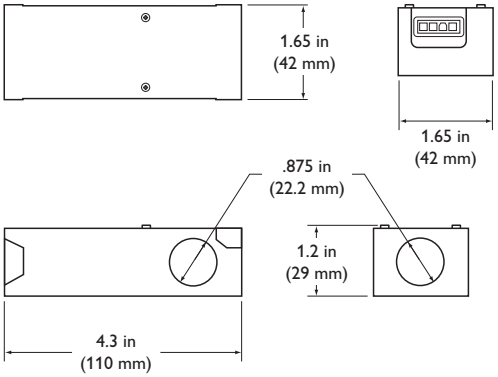
2. If using the Wiring Compartment to run conduit from the Data Enabler Pro to the first fixture in a series, pull cable through conduit. (We recommend standard 4-conductor 12 AWG copper wire.)

   Remove the cover from the Wiring Compartment. Using wire nuts, make wire connections inside the Wiring Compartment housing, then replace the cover. Connect the Wiring Compartment to the first fixture in the series.

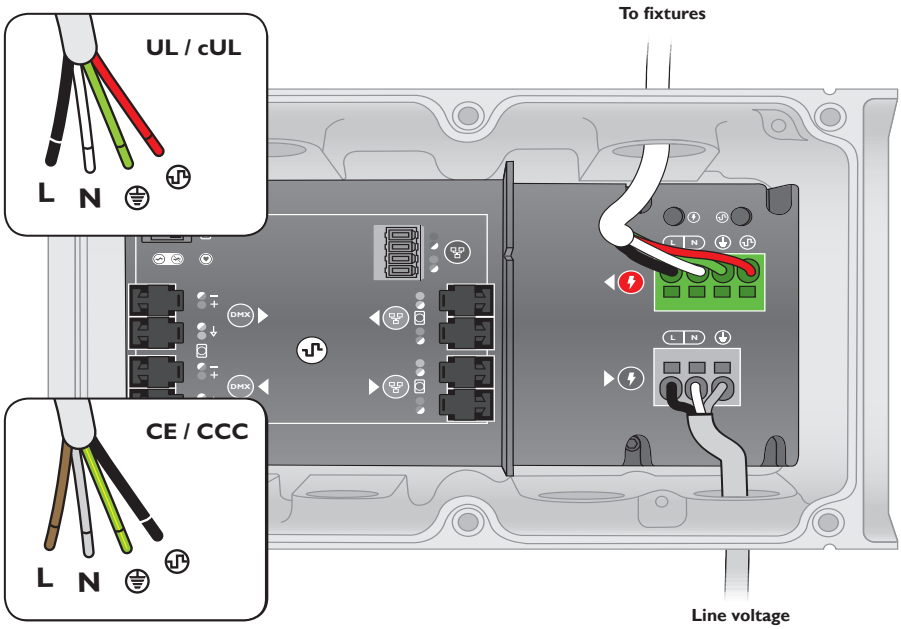



UL / cUL Wiring Compartment

## Wiring Compartment dimensions




3. Secure connections within the Data Enabler Pro housing.




4. Repeat steps 1 – 3 for each Data Enabler Pro in the installation.

# Address and Configure the Fixtures

Make sure the power is ON before addressing and configuring fixtures.

eW Fuse Powercore with Precision Dimming fixtures are addressable in 1 ft (305 mm) segments, or nodes. eW Fuse Powercore with Precision Dimming fixtures have one or four nodes, depending on fixture length. Each node is identified by a unique serial number.

## Switching Between 8-Bit and 16-Bit Mode

eW Fuse Powercore with Precision Dimming fixtures operate in 8-bit mode by default. You can configure eW Fuse Powercore with Precision Dimming to operate in 16-bit mode, which increases fixture resolution for smoother dimming.

In 8-bit mode, each fixture node uses one DMX address. In 16-bit mode, each fixture node uses two DMX addresses. The first DMX address corresponds to the "coarse" data for that channel, and the second corresponds to the "fine" data. By using double the number of DMX addresses, 16-bit mode increases fixture resolution from 256 dimming steps to 65,536 (256 x 256) dimming steps.

You can switch between 8-bit mode and 16-bit mode using QuickPlay Pro addressing and configuration software.

*You can download QuickPlay Pro from www.philipscolorkinetics.com/support/addressing.*

## Changing Default Starting DMX Addresses

Each eW Fuse Powercore with Precision Dimming node comes factory-addressed with a starting DMX address of 1. For lighting designs where fixtures work in unison, all nodes can be assigned the same starting DMX address.

For monochrome effects that show different intensities on different fixture nodes simultaneously, you must assign unique DMX addresses to nodes and sort them in a useful order.

- In Ethernet installations, you can address and configure your fixtures using QuickPlay Pro with a computer connected to your lighting installation's network. QuickPlay Pro can automatically discover all of your fixtures, controllers, and Data Enabler Pro devices for quick configuration.
- In DMX installations, you can address and configure your fixtures using QuickPlay Pro with iPlayer 3 or SmartJack Pro. You can manually enter fixture serial numbers, or you can import a spreadsheet listing each fixture's serial number and starting DMX address.

## Some Notes on Controlling eW Fuse Powercore with Precision Dimming Fixtures

Keep in mind that you must use a 16-bit lighting controller to operate eW Fuse Powercore with Precision Dimming fixtures in 16-bit mode. To use 8-bit controllers, such as iColor Keypad, ColorDial Pro, and iPlayer 3, you must make sure that fixtures are in 8-bit mode.

To control eW Fuse Powercore with Precision Dimming with iColor Keypad, select the Fixed Color effect in iColor Keypad Effect Manager, set the R channel to 100%, the G channel to 0%, and the B channel to 0%. When you run the Fixed Color effect, you can use the Increase Brightness and Decrease Brightness buttons on the iColor Keypad to control the fixtures.

When creating a light map in ColorPlay 3 to create a monochromatic light show for iPlayer 3 or iColor Player, use the generic single-channel fixture type to represent eW Fuse Powercore with Precision Dimming fixtures. When creating a light map using the LSC Management Tool for Light System Manager, you can add RGB lights to your light interface and modify the starting DMX channel of each fixture to create a consecutive sequence of lights.

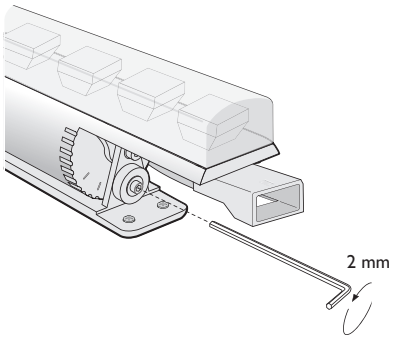
# Aim and Lock the Fixtures

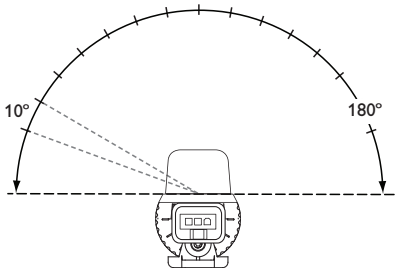
Make sure the power is ON before aiming and locking fixtures.

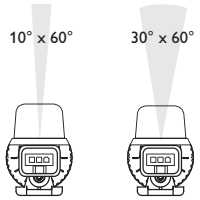
Aim the fixtures by rotating each fixture to the correct angle. There are detents every 10° in the bracket that hold it in position.

(Optional) Using a 2 mm hex key wrench, tighten the set screw located on each end of the fixture to lock the fixture in place.

*Do not look directly into the fixture when aiming and locking.*

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