

# eColor Fuse Powercore

Linear interior LED wall grazing fixture with solid color light



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With narrow and medium beams of intense solid color light, eColor Fuse Powercore is an excellent choice for 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. Lowers installation, energy, and maintenance costs. Offers environmentally-conscious buyers a green, energy-efficient grazing fixture with industry-leading quality and quantity of light.

- High-performance beam quality Available in 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 for end-to-end installation with no light scalloping between fixtures.
- Integrates patented Powercore technology —
   Powercore rapidly, efficiently, and accurately
   controls power directly from line voltage,
   eliminating the need for an external power supply,
   dramatically simplifying installation, and lowering
   total system cost.
- Support for multiple voltages Accepts power input of 100 – 277 VAC for consistent installation and operation from line voltage in any location around the world.
- Dimming capability Patented DIMand technology offers smooth dimming capability with selected commercially available reverse-phase ELV-type dimmers.

- Simple installation Contractor-friendly installation 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 turns of up to 180°, eColor 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.



#### Cost-effective alternative

Long, useful source life and lowmaintenance operation provide a cost-effective alternative to traditional grazing fixtures.



10° x 60° beam angle



30° x 60° beam angle

 ★ For help estimating the light output and distribution of eColor lighting fixtures, please contact Philips Color Kinetics Applications Engineering Services at support@colorkinetics.com.



# Specifications

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

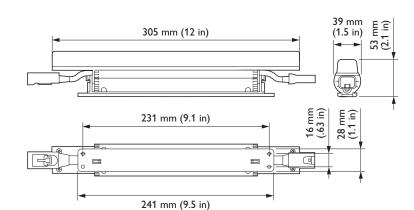
Item	Specification	1 ft (305 mm)	4 ft (1.2 m)	
Output	Beam Angle	10° × 60° / 30° × 60°		
Electrical	Input Voltage	100 – 277 VAC, auto-ranging, 50 / 60 Hz		
	Power Consumption  Max. at full output, steady state	12.5 W (Red / Green / Blue) 10 W (Amber)	50 W (Red / Green / Blue) 40 W (Amber)	
Control	Dimming	Compatible with selected commercially available reverse-phase ELV-type dimmers*		
Physical	Dimensions (Height x Width x Depth)	2.1 x 12 x 1.5 in (53 x 305 x 38 mm)	2.1 × 48 × 1.6 in (53 × 1219 × 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 Ranges	-4° - 122° F (-20° - 50° C) Operating -4° - 122° F (-20° - 50° C) Startup -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, FCC Class B, CE, CCC, SAA, C-Tick		
	Environment	Dry / Damp Location, IP20		

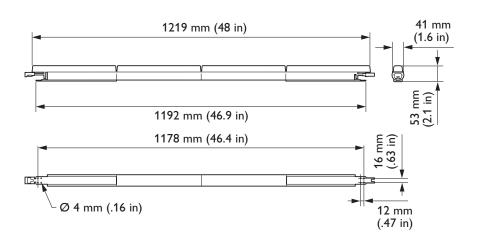
<sup>\*</sup> Refer to www.philipscolorkinetics.com/support/appnotes/ for specific details.





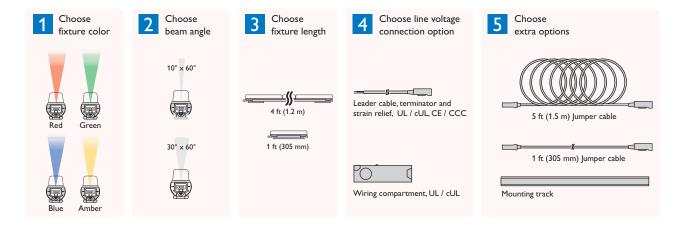






# **Product Selection**

To order eColor Fuse Powercore, select fixture color, beam angle, fixture length, line voltage connection option, and any extra options you might need.



### **Fixtures**

Item	Color	Beam Angle	Item Number	Philips 12NC
	Red	10° × 60°	223-000065-08	910503701709
		$30^{\circ} \times 60^{\circ}$	223-000065-12	910503701713
	Green	10° × 60°	223-000065-09	910503701710
eColor Fuse Powercore		30° × 60°	223-000065-13	910503701714
1 ft (305 mm)	Blue	10° × 60°	223-000065-10	910503701711
		$30^{\circ} \times 60^{\circ}$	223-000065-14	910503701715
		10° × 60°	223-000065-11	910503701712
	Amber	30° × 60°	223-000065-15	910503701716
Item	Color	Beam Angle	Item Number	Philips 12NC
	Red	10° × 60°	223-000065-16	910503702599
		$30^{\circ} \times 60^{\circ}$	223-000065-20	910503702604
	Green	10° × 60°	223-000065-17	910503702601
eColor Fuse Powercore		30° × 60°	223-000065-21	910503702605
4 ft (1.2 m)	Blue	10° × 60°	223-000065-18	910503702602
		$30^{\circ} \times 60^{\circ}$	223-000065-22	910503702606
	Amber	10° × 60°	223-000065-19	910503702603
		30° × 60°	223-000065-23	910503702607

Use Item Number when ordering in North America.

#### Accessories

Item	Type / Qty.	Length	Item Number	Philips 12NC	
Leader Cable with terminator and strain relief	UL / cUL	10 ft (3 m)	108-000047-00	910503700972	For connection to
	CE / CCC	10 ft (3 m)	108-000047-01	910503700973	standard junction box
Wiring Compartment with terminator	UL / cUL		120-000077-01	910503700994	Can be used for direct connection to conduit
	UL / cUL	1 ft (305 mm)	108-000048-00	910503700974	
lumanan Cabla		5 ft (1.5 m)	108-000048-01	910503700975	Depending on the installation's design, you may need jumper cables to add space
Jumper Cable	CE / CCC	1 ft (305 mm)	108-000048-02	910503700976	between fixtures.
		5 ft (1.5 m)	108-000048-03	910503700977	
Terminators	Quantity 10		120-000099-00	910503701120	
Mounting Track, White	Quantity 1	4 ft (1219 mm)	120-000124-00	910503701787	Optional mounting track ensures straight runs of fixtures.

Use Item Number when ordering in North America.

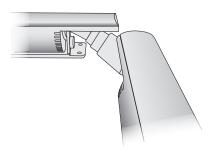
#### Included in the box

eColor Fuse Powercore fixture Installation Instructions

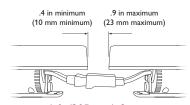
Refer to the eW / eColor Fuse Powercore Installation Instructions for specific warning and caution statements.

#### Easy turns

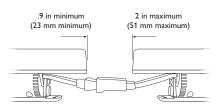
End-to-end locking power connectors can make turns of up to 180° without jumper cables.



# Distance between fixtures joined end-to-end



1 ft (305 mm) fixtures



4 ft (1.2 m) fixtures

- To calculate the number of fixtures your specific installation can support, download the Configuration Calculator from www. philipscolorkinetics.com/support/install\_tool/, or consult Philips Color Kinetics Application Engineering Services at support@colorkinetics.com.
- Refer to the installation instructions included with the wall or dimmer switch for installation and wiring information.

### Installation

eColor Fuse Powercore offers high-output, energy-efficient indoor solid color cove and indirect lighting with Powercore technology. Powercore technology, which 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 eColor Fuse Powercore 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.

### Create a Layout Plan

Regardless of the size and complexity of your installation, the time you spend up front can help minimize installation and configuration issues later. Keep these suggestions in mind as you plan your installation:

- On an architectural diagram or other diagram that shows the physical layout of
  the installation, create a layout map that specifies the appropriate location of the
  light fixtures in relation to each other, and to any dimmer switches, wall switches,
  and line power sources. Identify any obstacles or physical features requiring flexible
  jumper cables between fixtures.
- eColor 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.
- You can install a run of eColor Fuse Powercore fixtures using the 10 ft (3 m)
  Leader Cable with flying leads. This option is preferable when connecting to
  a third-party junction box, or when retrofitting an existing incandescent or
  fluorescent cove lighting installation.

### Install Wall and Dimmer Switches (Optional)

eColor Fuse Powercore fixtures can be controlled either with a standard wall switch (on / off) or a compatible, commercially available reverse-phase ELV-type dimmer.

For a list of compatible ELV dimmers, and for details on selecting the appropriate dimmer for your lighting installation, visit www.philipscolorkinetics.com/support/appnotes, or consult Applications Engineering services at support@colorkinetics.com.

### Prepare for the Installation

- 1. Verify that all supporting equipment (switches, line power sources) is in place.
- 2. If your installation calls for jumper cables to add space between fixtures, make sure they are available.
- Ensure that all additional parts (optional mounting tracks, mounting hardware, terminators) and tools are available.

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### Install the Fixtures

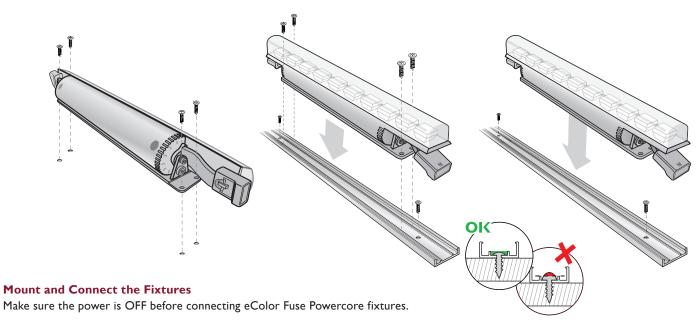
You can mount eColor Fuse Powercore fixtures directly to a wall, ceiling, cabinet, or other secure surface. You can install several eColor Fuse Powercore fixtures in optional 4 ft (1.2 m) lengths of mounting track to ensure a straight run.

#### **Install Mounting Tracks (Optional)**

- 1. Field-cut the mounting tracks to the desired length with a hacksaw 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 pilot holes are required. Hold the fixture in place and mark the four screw holes.



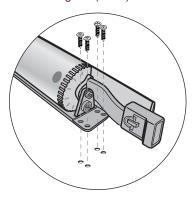
- 1. Rotate an eColor Fuse Powercore fixture as necessary to provide unobstructed access to the mounting holes.
- 2. Position the first fixture in a series.

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

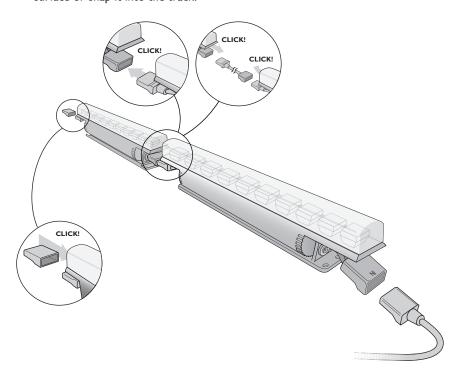
If using mounting tracks on vertical or overhead surfaces, or if not using mounting tracks, attach 1 ft (305 mm) fixtures with four #6 (3.5 mm) mounting screws each (not included) suitable for the mounting surface. Attach 4 ft (1.2 m) fixtures with eight #6 (3.5 mm) mounting screws suitable for the mounting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

Ensure that the male connector is in position to receive power from the female connector on the Leader Cable or Wiring Compartment.

### Mounting 4 ft (1.2 m) fixtures

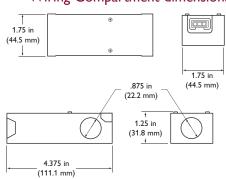


3. Position the next fixture in the series, matching the male connector end to the female connector of the previously mounted fixture. Attach the fixture to the surface or snap it into the track.



- 4. Continue mounting the fixtures making power connections as you go, until all lights in the series are mounted.
- 5. Insert the provided terminator into the last fixture in the series.

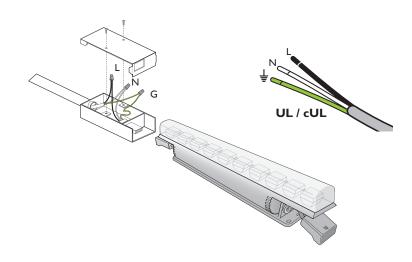
### Wiring Compartment dimensions



### Make Power Connections

To run power or conduit to the first fixture in a series (UL / cUL installations):

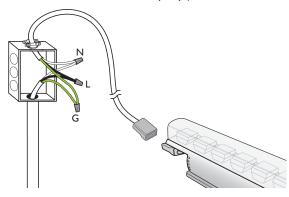
1. Remove the cover from the eW Fuse Powercore Wiring Compartment.



- 2. Using wire nuts, connect ground, neutral, and line inside the Wiring Compartment housing, then replace the cover.
- 3. Connect the eW Cove Powercore Wiring Compartment to the first fixture in the series.

# To connect the first fixture in a series to a third-party junction box using the 10 ft (3 m) Leader Cable (UL / cUL installations):

1. Remove the cover of the third-party junction box.



- 2. Connect ground, neutral, and line inside the junction box housing, then replace the junction box cover.
- 3. Connect the 10 ft (3 m) Leader Cable to the first fixture in the series.

#### For CE / CCC installations:

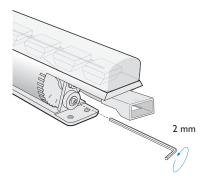
- 1. Connect the Leader Cable to a terminal block. For CE installation, the terminal block must conform to EN 60998-2-1 or EN 60998-2-2, rated 220 240 VAC.
- 2. Connect ground, neutral, and line to a power source.
- 3. Connect the 10 ft (3 m) Leader Cable to the first fixture in the series.

### Aim and Lock the Fixtures

Make sure the power is ON before aiming fixtures.

Aim the fixtures by rotating each fixture to the correct angle. There are detents every  $10^{\circ}$  in the bracket that hold the fixture in position.

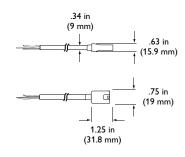
(Optional) Using a 2 mm hex key wrench, tighten the set screw located on each end of the fixture to lock the fixture in place.

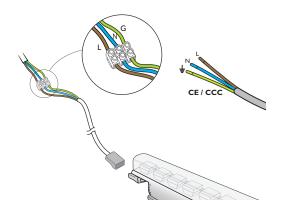




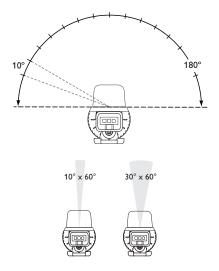
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#### Leader Cable connector dimensions





**&** Do not look directly into beam when aiming fixtures.



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