

eColor Reach Compact Powercore

Premium long-throw compact exterior LED floodlight with solid color light



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eColor Reach Compact Powercore combines all the benefits of LED-based lighting in a compact fixture specifically designed for large-scale installations calling for high-quality red, green, blue, or amber light, including skyscrapers, casinos, large retail exteriors, bridges, piers, public monuments, and themed attractions. With levels of light output and light projection never before achieved in a compact LED lighting fixture, eColor Reach Compact Powercore delivers intense, energy-efficient output at a reasonable price, opening up new possibilities for exterior illumination.

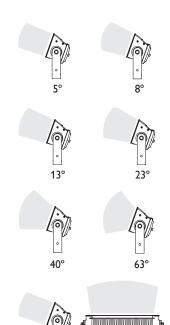
- Integrates Powercore technology Powercore rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage, eliminating the need for an external power supply. Contractor-friendly installation dramatically simplifies installation and lowers total system cost.
- Versatile optics Exchangeable spread lenses of 8°, 13°, 23°, 40°, 63°, and an asymmetric 5° x 17° support a variety of photometric distributions for a multitude of applications, including spotlighting, wall grazing, and asymmetric wall washing. Bezel and gasket are included with spread lenses for easy user installation.
- Saturated, cost-effective color Highperformance LEDs offer rich, saturated color at significantly less cost for installation, operation and maintenance than traditional light sources.

- Simple fixture positioning Rugged, slim-profile mounting bracket allows flexible positioning and fixture rotation through a full 360°. Side locking bolts reliably secure fixture with standard wrench.
- Universal power input range Accepts a universal power input range of 100 – 240 VAC, allowing simple, location-independent installation.



Intense light output

eColor Reach Compact Powercore outputs thousands of lumens and throws light hundreds of feet, delivering legitimate LEDbased illumination of large-scale structures and objects in a compact, fully-sealed housing. For help estimating the light output and distribution of eColor lighting fixtures, please contact Philips Color Kinetics Applications Engineering Services at support@colorkinetics.com.



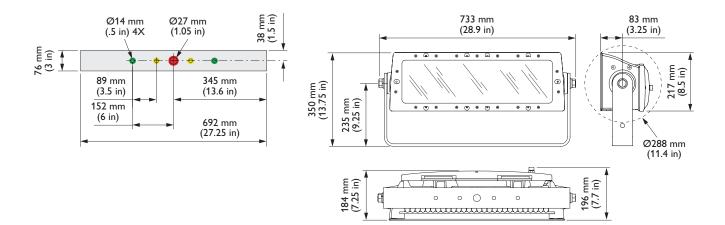
5° x 17°

Specifications

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

		, , ,
ltem	Specification	Details
Output	Beam Angle	5° native $8^\circ, 13^\circ, 23^\circ, 40^\circ, 63^\circ,$ and 5° x 17° (asymmetric) spread lenses
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz
	Power Consumption	125 W
Control		On / Off
Physical	Dimensions (Height x Width x Depth)	8.5 x 28.9 x 7.7 in (217 x 733 x 196 mm)
	Weight	51 lb (23 kg)
	Effective Projected Area (EPA)	0.186 m ²
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Tempered glass
	Fixture Connections	Integral male / female waterproof connector, 6 ft (1.8 m) Leader Cable
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage
	Humidity	0 – 95%, non-condensing
Certification and Safety	Certification	UL / cUL, FCC Class A, CE, PSE
	Environment	Dry / Damp / Wet Location, IP66





Fixtures and Accessories

eColor Reach Compact Powercore fixtures are part of a complete line-voltage system which includes fixtures and:

- One 6 ft (1.8 m) Leader Cable to connect each eColor Reach Compact Powercore fixture to a power source.
- 3-conductor copper wire to connect eColor Reach Compact Powercore fixtures in series or in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

ltem	Туре		Item Number	Philips 12NC
	Red	UL / cUL	223-000079-00	910503703279
		CE / PSE	223-000079-01	910503704177
	Green	UL / cUL	223-000079-02	910503703946
eColor Reach Compact		CE / PSE	223-000079-03	910503704178
Powercore Includes 6 ft (1.8 m) Leader Cable	Blue	UL / cUL	223-000079-04	910503703947
		CE / PSE	223-000079-05	910503704179
	Amber	UL / cUL	223-000079-06	910503703948
		CE / PSE	223-000079-07	910503704180
Replacement Leader Cable	UL / cUL		108-000046-00	910503700621
6 ft (1.8 m)	CE / PSE		108-000046-01	910503700622
	13°		120-000068-00	910503700506
	23°		120-000068-01	910503700507
Spread Lens with bezel	40°		120-000068-02	910503700508
spread Lens with bezen	63°		120-000068-03	910503700509
	Asymmetric (5° x 17°)		120-000068-04	910503700510
	8°		120-000068-05	910503700511

Use Item Number when ordering in North America.

Installation

eColor Reach Compact Powercore, a high-performance exterior architectural floodlight, is designed to brilliantly illuminate signature façades. Because each eColor Reach Compact Powercore fixture weighs 51 lb (23 kg), you may need two people to lift the fixture out of the box and position it in the mounting location. Optional accessory optics require the installation of both a spread lens and a bezel over the fixture's primary lens.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate eColor Reach Compact 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.

Installing in Damp or Wet Locations

When installing in damp or wet locations, you must seal all junction boxes with electronics-grade RTV silicone sealant so that water or moisture cannot enter or accumulate in wiring compartments, cables, fixtures, or other electrical parts. You must use suitable outdoor-rated junction boxes when installing in wet or damp locations. Additionally, you must use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes.

Prepare for the Installation

1. Determine the appropriate location of the eColor Reach Compact Powercore fixtures in relation to each other.

eColor Reach Compact Powercore fixtures can be installed in series or in parallel (wired to a common junction box). The maximum number of fixtures each circuit can support depends on specific configuration details such circuit size, line voltage, and method of connection (in series or in parallel). As an example, the table to the left lists the maximum number of fixtures each circuit can support at various voltages, assuming a 20A circuit, standard 6 ft (1.8 m) Leader Cables, and 5 ft (1.5 m) jumper cables between fixtures. Keep in mind that these figures, provided as a guideline, are accurate for the specified configuration only. Changing the configuration can affect the fixture run lengths.

- 2. Ensure that all additional parts and tools are available, including:
 - A 28 mm hex or adjustable wrench for adjusting the locking bolts on the fixture bracket
 - One electrical junction box per fixture, rated for your application. (Refer to the junction box manufacturer's literature for additional items required for mounting or sealing.)
 - A sufficient length of 3-conductor copper wire. We recommend 12 AWG (2.05 mm) stranded wire.
 - · Conduit as required
 - Electronics-grade room temperature vulcanizing (RTV) silicone sealant

Refer to the eColor Reach Compact Powercore Installation Instructions for specific warning and caution statements.

Position and Mount Fixtures

Ensure that the fixture mounting locations and substrates are sufficiently sturdy to bear the weight of each eColor Reach Compact Powercore fixture. Pre-drill holes in the mounting substrate if necessary, making reference to the mounting bracket dimensions. Use at least two screws to secure each fixture, one on either side of the mounting bracket's central screw hole.

If mounting eColor Reach Compact Powercore on a lighting pole, make sure the pole can both support the total weight of the fixtures and withstand the maximum velocity winds to which it will be subjected. Each fixture weighs 51 lb (23 kg), and has an effective projected area (EPA) of 0.42 m^2 .

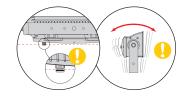
1. Unpack eColor Reach Compact Powercore fixtures. You may need two people to lift the fixture out of the box and position it in the mounting location.

2.



Position each eColor Reach Compact Powercore fixture in its designated mounting location. Make sure the mounting area is clear of debris and other obstructions.

 Loosen the locking bolts, using a 28 mm hex or adjustable wrench, and rotate the fixture to access the mounting bracket. Tilting the fixture 90° affords 9.1 in (231 mm) clearance.

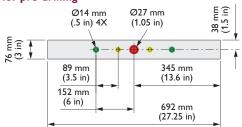


So Do not rest eColor Reach Compact Powercore on its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.



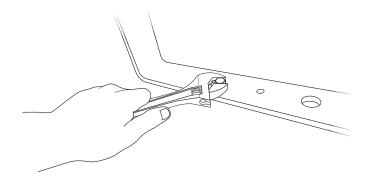
eColor Reach Compact Powercore fixture		
6 ft (1.8 m) Leader Cable		
Cable Strain Relief		
Installation Instructions		

Mounting bracket dimensions for pre-drilling



Ø288 mm (11.4 in)

83 mm (3.25 in) 4. If mounting holes have been pre-drilled, align the mounting bracket's screw holes with the pre-drilled holes. Mount the fixture bracket using hardware appropriate for the mounting substrate. Use at least two screw to secure each fixture, one on either side of the mounting bracket's central screw hole.

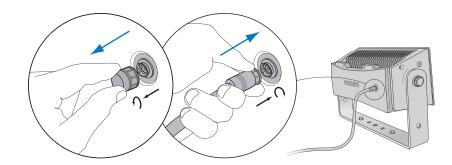


Connect Fixtures

eColor Reach Compact Powercore fixtures can be installed in series or in parallel (wired to a common junction box). Ensure that all junction boxes are suitable for the environment and that all wiring between junction boxes complies with local codes.

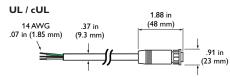
Make sure the power is OFF before connecting eColor Reach Compact Powercore fixtures.

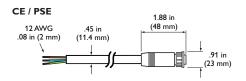
- 1. Install junction boxes. (Refer to the manufacturer's literature for additional items required for mounting or sealing.)
- 2. If installing fixtures in a series, pull 3-conductor copper wire between each junction box in the series. If installing fixtures in parallel, pull 3-conductor copper wire from a power source to a common junction box, and from the common junction box to each fixture's junction box.
- 3. If necessary, remove the connector cap from the port on the back of the eColor Reach Compact Powercore housing. Insert the Leader Cable into the port. Turn the Leader Cable's lock nut to the right until it locks into place.

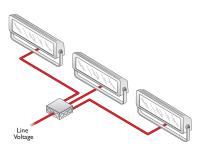


- 4. Use wire nuts to connect line, neutral, and ground. If installing in series, connect the Leader Cable from each fixture to the fixture's junction box. If installing in parallel, connect the Leader Cable from each fixture to the lead wire from the power source in the common junction box.
- 5. Tuck wire connections into the junction box.

Leader cable dimensions







eColor Reach Compact Powercore fixtures installed in parallel

UL / cUL

CE / PSE

Product Guide

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eColor Reach Compact Powercore

Connect to Power

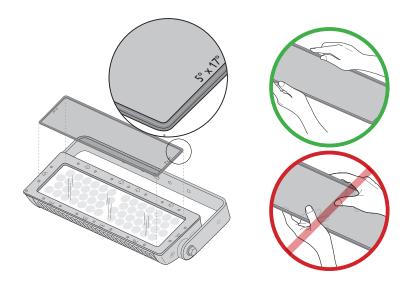
You can connect the first junction box in a series, or a common junction box in a parallel installation, directly to a power source.

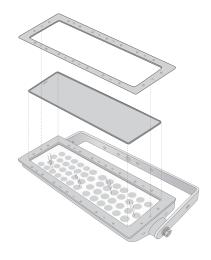
- 1. Run a sufficient length of 3-conductor wire from the first junction box in the series to the power source, or, if installing in parallel, run the wiring from the common junction box to the power source.
- 2. If installing in a wet or damp location, seal all junction boxes with electronicsgrade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.

Attach Spread Lenses (Optional)

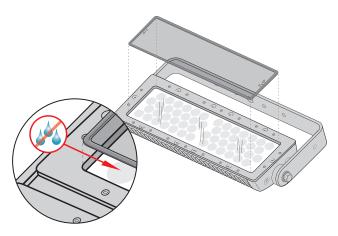
Exchangeable eColor Reach Compact Powercore spread lenses of 8° , 13° , 23° , 40° , 63° , and an asymmetric $5^{\circ} \times 17^{\circ}$ support a variety of photometric distributions for a multitude of applications, including spotlighting, wall grazing, and asymmetric wall washing.

- 1. Unpack and confirm the contents of the box. Each box contains one lens kit, consisting of a spread lens with attached rubber gasket, and a bezel with 10 captured mounting screws.
- Clean both sides of the spread lens and the face of the eColor Reach Compact Powercore housing, including glass surfaces, using a mild, non-abrasive cleaner. Ensure that all surfaces are dry, and that the gasket is properly fitted to the lens.
- 3. Position the spread lens so that the beam-angle designation on the side of the lens is face up. Handle the spread lens by the gasket, making sure not to touch or soil either surface of the spread lens.

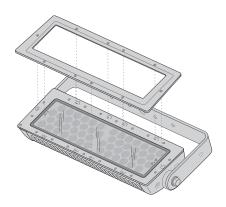




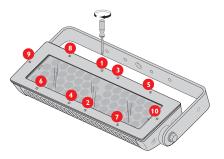
For installations in extreme environments, refer to the Reach Spread Lens Kit Installation Instructions for details on sealing the spread lens and bezel to prohibit water ingress. 4. Place the spread lens on top of the eColor Reach Compact Powercore housing. Make sure that the spread lens and gasket are seated properly within the fixture housing. Also make sure that there is no moisture between the spread lens and the glass lens, as any moisture will compromise the effectiveness of the spread lens.



5. Position the bezel over the spread lens.



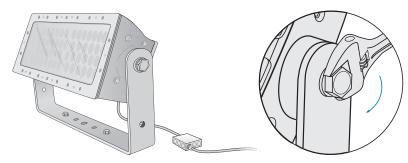
6. With a standard #2 Phillips screwdriver, attach the bezel to the fixture housing using the provided screws. To ensure a watertight seal, tighten the screws to approximately 20 - 30 in-lbs (2.2 - 3.4 Nm) in the sequence shown below.



Aim and Lock the Fixtures

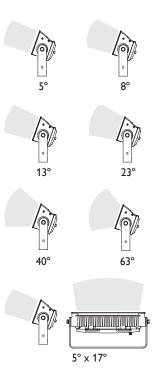
Make sure that the power is $\ensuremath{\mathsf{ON}}$ before aiming fixtures.

- 1. Aim the fixtures by rotating each fixture to the correct angle.
- 2. Lock the fixtures by tightening the locking bolts using a 28 mm hex or adjustable wrench.



Or not look directly into the fixture when aiming and locking.

So For exterior applications with direct exposure to water, eColor Reach Compact Powercore fixtures should not be aimed directly upwards, as water may pool on the lens and affect beam quality. Instead, the fixture should be angled to allow for proper water drainage.





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