eColor Reach Powercore gen2

Premium long-throw exterior LED floodlight with solid color light

PHILIPS

COLOR KINETICS

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eColor Reach Powercore gen2 combines all the benefits of LED-based lighting and control in an elegant fixture specifically designed for large-scale installations, such as skyscrapers, casinos, bridges, piers, public monuments, and themed attractions. With significantly more lumen output than any other competitive fixture and unprecedented light projection, this powerful fixture represents the next generation in exterior illumination. Fixtures are available in solid red, green, blue, or amber light.

- Integrates Powercore technology — Powercore technology rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage.
- Versatile optics — Native 5° beam angle and 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.
- Unique split design — Spread lenses fit over each half of the fixture to support diffuser combinations. For instance, you could use one spread lens on the fixture's lower half to bathe a large façade with light at street level, and a different spread lens to project light hundreds of feet up the building's walls.
- Simple fixture positioning — Rugged, slim-profile mounting bracket allows simple positioning and fixture rotation through a full 360°. Side locking bolts reliably secure fixture with a standard wrench.

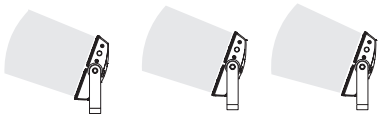
Universal power input range
eColor Reach Powercore gen2 accepts a universal power input range of 100 – 240 VAC, allowing consistent installation around the world.

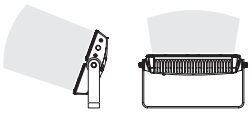
Specifications

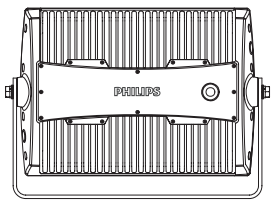
Due to continuous improvements and innovations, specifications may change without notice.

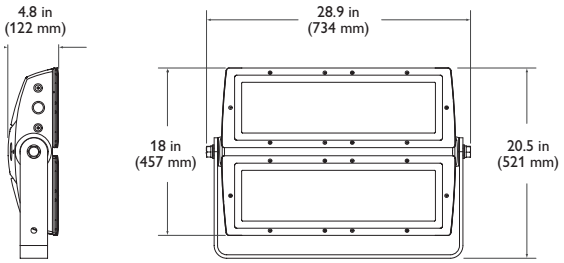
Item	Specification	Details
Output	Beam Angle	5° primary optic (no spread lens) 8° / 13° / 23° / 40° / 63° / 5° x 17° (asymmetric) spread lenses
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz
	Power Consumption	250 W maximum at full output, steady state
Control		On / Off
Physical	Dimensions *(Height x Width x Depth)*	20.5 x 28.9 x 4.8 in (521 x 734 x 122 mm)
	Weight	75 lb (34 kg)
	Effective Projected Area (EPA)	0.42 m^2
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Tempered glass
	Fixture Connections	6 ft (1.8 m) unified power / data 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
	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 A, CE, PSE, C-Tick
	Environment	Dry / Damp / Wet Location, IP66

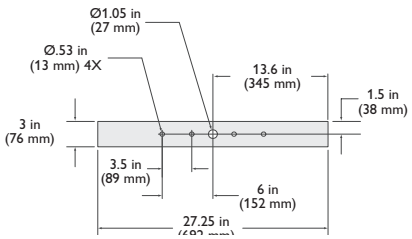
For help estimating the light output and distribution of eColor lighting fixtures, please contact Philips Color Kinetics Applications Engineering Services at support@colorkinetics.com.

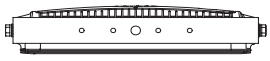












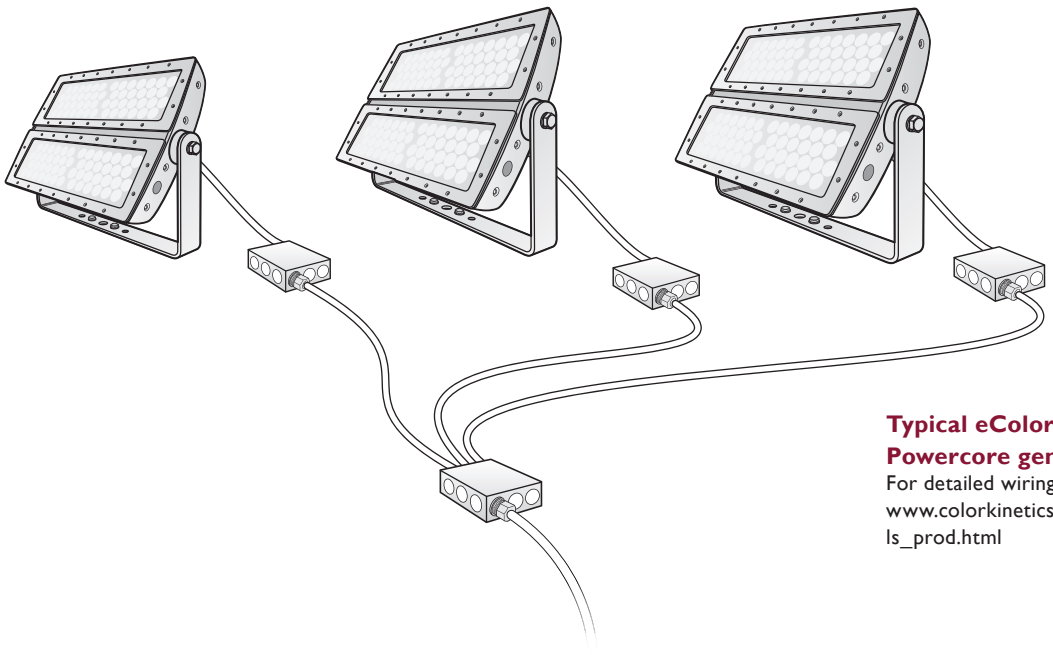
Fixtures and Accessories

eColor Reach Powercore gen2 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 Powercore gen2 fixture to a power source.
- 3-conductor copper wire to connect eColor Reach Powercore gen2 fixtures in series or in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

Item	Type	Item Number	Philips 12NC
eColor Reach Powercore gen2 *Includes 6 ft (1.8 m) Leader Cable*	Red	523-000044-58	910503703940
	Green	523-000044-60	910503703941
	Blue	523-000044-62	910503703942
	Amber	523-000044-64	910503703943
Replacement Leader Cable 6 ft (1.8 m)	UL / cUL	108-000046-00	910503700621
	CE	108-000046-01	910503700622
Spread Lens with bezel	13°	120-000068-00	910503700506
	23°	120-000068-01	910503700507
	40°	120-000068-02	910503700508
	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.



Power Source

Typical eColor Reach Powercore gen2 installation

For detailed wiring diagrams visit www.colorkinetics.com/support/wiring/ls_prod.html

Installation

eColor Reach Powercore gen2, a high-performance exterior architectural floodlight, is designed to brilliantly illuminate signature façades. Because each eColor Reach Powercore fixture weighs 75 lb (34 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 on each half of the fixture.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate eColor Reach Powercore gen2 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 / eColor Reach Powercore Installation Instructions for specific warning and caution statements.

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 Powercore gen2 fixtures in relation to each other.

   eColor Reach Powercore gen2 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 as fixture spacing, circuit size, line voltage, and method of connection (in series or in parallel). For more information, and 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.

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

Position and Mount Fixtures

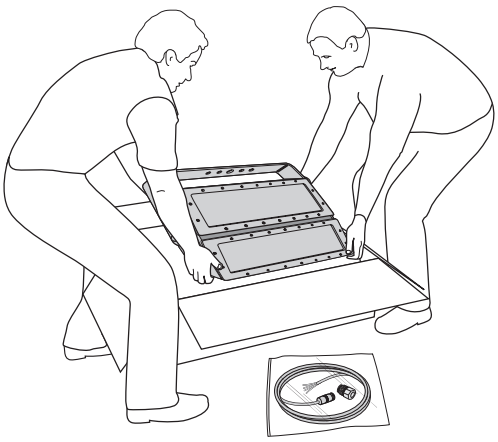
Ensure that the fixture mounting locations and substrates are sufficiently sturdy to bear the weight of each eColor Reach Powercore gen2 fixture. Pre-drill holes in the mounting substrate if necessary, making reference to the mounting bracket dimensions. Use at least two screws to secure each fixture, one on either side of the mounting bracket's central screw hole.

If mounting eColor Reach Powercore gen2 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 75 lb (34 kg), and has an effective projected area (EPA) of 0.42 m^2.

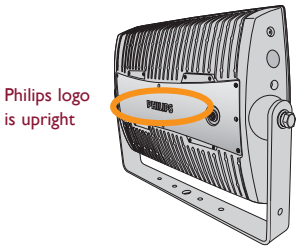
Included in the box

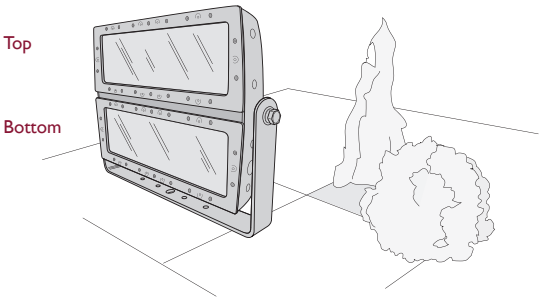
- eColor Reach Powercore gen2 fixture
- 6 ft (1.8 m) Leader Cable
- Cable Strain Relief
- Installation Instructions

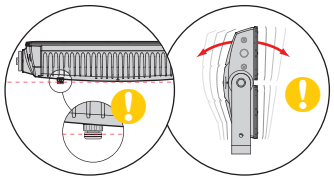
1. Unpack eColor Reach Powercore gen2 fixtures. You may need two people to lift the fixture out of the box and position it in the mounting location.



2. Position each eColor Reach Powercore gen2 fixture in its designated mounting location. Make sure the mounting area is clear of debris and other obstructions.

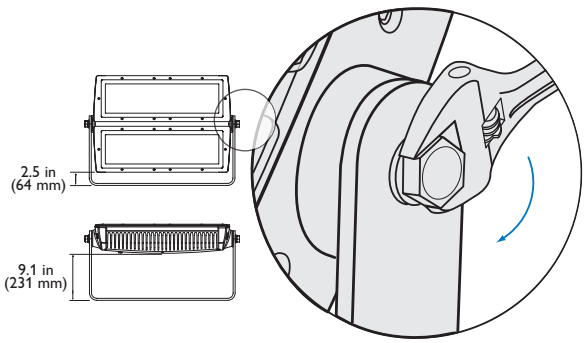






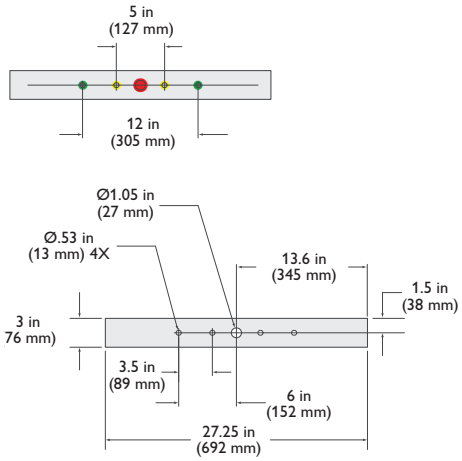
Do not rest eColor Reach Powercore gen2 on its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.

3. 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.

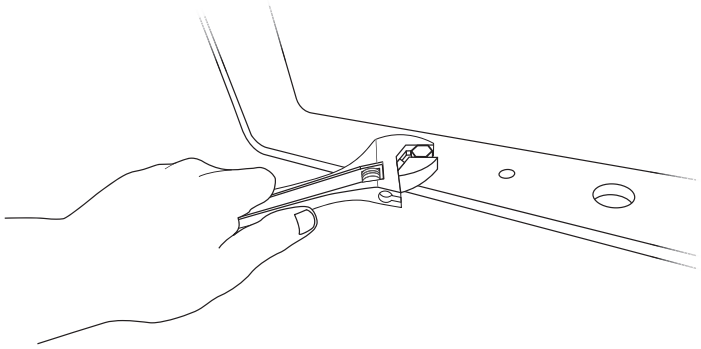


For exterior applications with direct exposure to water, eColor Reach Powercore gen2 fixtures should not be aimed directly upwards, as water may pool on the lens and affect beam quality. Instead, the fixture should be angled to allow for proper water drainage.

Mounting bracket dimensions for pre-drilling



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 screws to secure each fixture, one on either side of the mounting bracket's central screw hole.

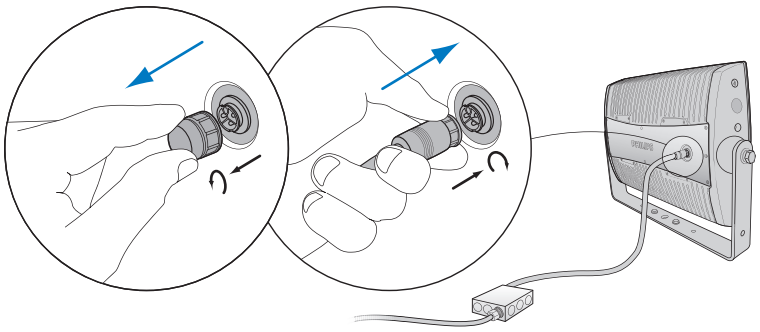


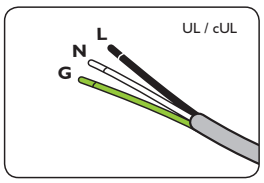
Connect Fixtures

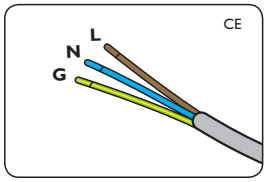
eColor Reach Powercore gen2 fixtures can be installed in series or in parallel (wired to a common junction box). Ensure that all junction boxes are suitable for the environment and that all wiring between junction boxes complies with local codes.

Make sure the power is OFF before connecting eColor Reach Powercore gen2 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 Powercore gen2 housing. Insert the Leader Cable into the port. Turn the Leader Cable's lock nut to the right until it locks into place.







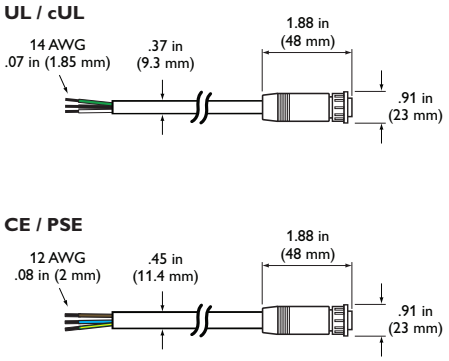
4. Use wire nuts to connect line, neutral, and ground. If installing in series, connect the Leader Cable from each fixture to the fixture's junction box. If installing in parallel, connect the Leader Cable from each fixture to the lead wire from the power source in the common junction box.
5. Tuck wire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

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 electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.

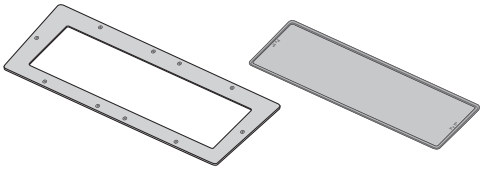
Leader Cable connector dimensions

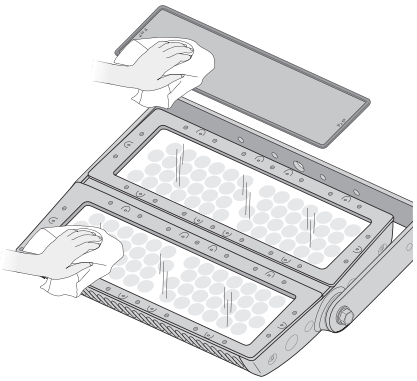


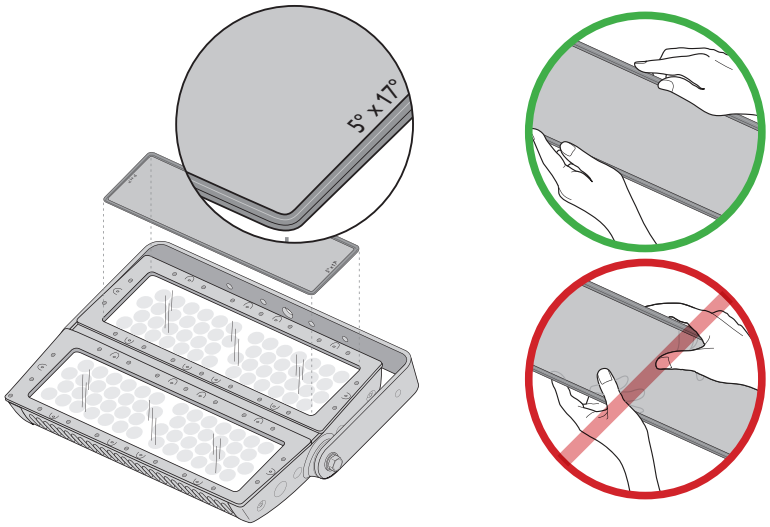
Attach Spread Lenses (Optional)

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. You can install different spread lenses on each half of the fixture's housing for precise control of light diffusion.

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.
2. Clean both sides of the spread lens and the face of the eColor Reach Powercore gen2 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.

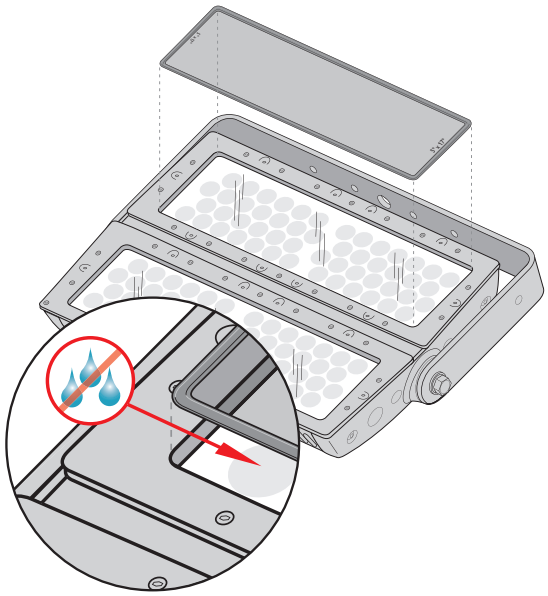




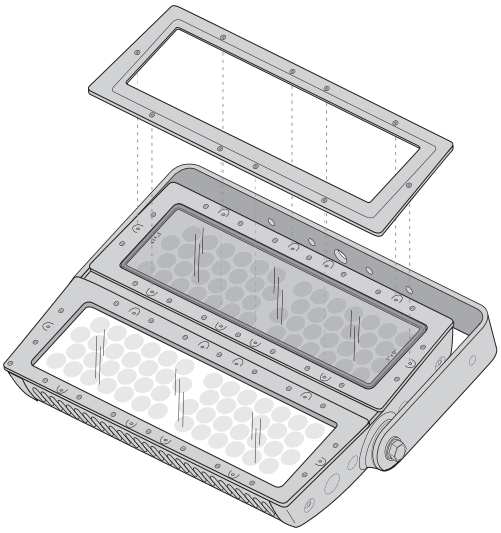


For installations in extreme environments, refer to the Reach Spread Lens Kit Installation Instructions for details on sealing the spread lens and bezel to prohibit water ingress.

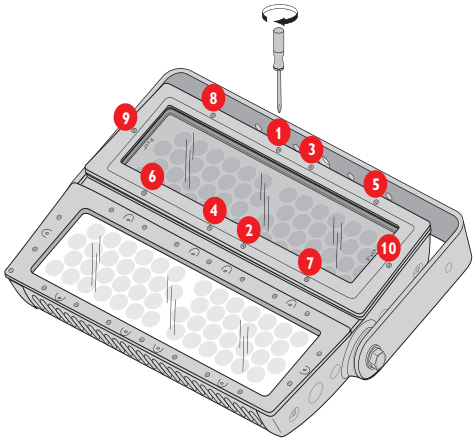
4 Place the spread lens on top of the eColor Reach Powercore gen2 housing. Make sure that the spread lens and gasket are seated properly within the fixture housing. Also make sure that there is no moisture between the spread lens and the glass lens, as any moisture will compromise the effectiveness of the spread lens.



5. Position the bezel over the spread lens.



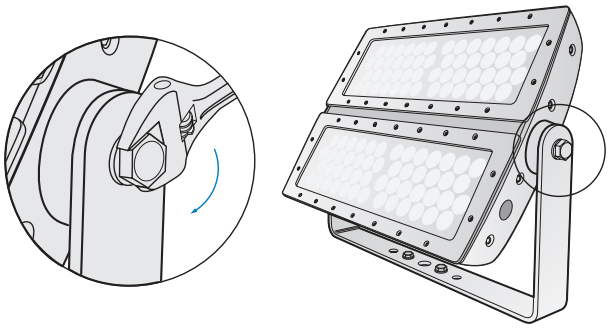
6. With a standard #2 Phillips screwdriver, attach the bezel to the fixture housing using the provided screws. To ensure a watertight seal, tighten the screws to approximately 20 – 30 in-lbs (2.2 – 3.4 Nm) in the sequence shown below.



Aim and Lock the Fixtures

Make sure that the power is ON before aiming fixtures. Do not look directly into the fixture when aiming and locking.

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.



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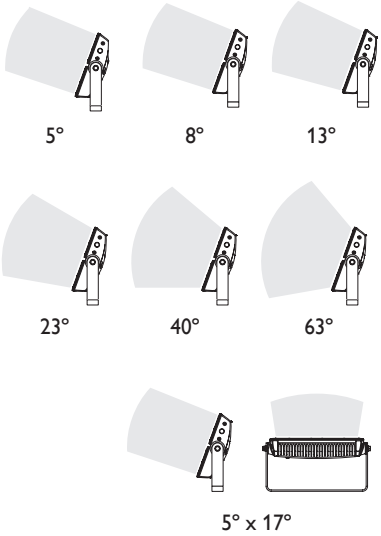

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