Elegance meets efficiency

Philips MASTER LED lamps - Combining quality light with low energy and maintenance costs has never been so easy

PHILIPS

sense **and** simplicity

Be inspired by a simple and economical bright-light solution

With Philips' cutting-edge MASTER LED retrofit solution, it is now possible to reduce energy consumption and maintenance costs without compromising on light quality and ambience. As well as being ultra-easy to install, MASTER LED offers low cost of ownership, with a payback period of less than a year in professional applications such as hotels, bars, shops and offices. This innovative lamp emits no heat, UV or infrared in the light beam. And it contains no mercury, making it fully compliant with all European environmental legislation – a truly sustainable solution!

asimpleswitch.com

- **Energy saving**
  Up to 80% energy saving compared to standard dichroic low-wattage halogen lamps and incandescent lamps

- **Low maintenance costs**
  Long life – 45,000 hours; up to 45 times longer than incandescent, up to 25 times longer than traditional halogen and up to 10 times longer than compact fluorescent lamps

- **High quality light**
  Clear cool or comfortable warm, dimmable light. Less heat, UV or infrared in the beam

- **Easy installation**
  The MASTER LED range is compatible with existing E27, MR16 and GU10 lamp fittings

- **Short payback period**
  In 18 to 24-hours per day applications, the payback for MASTER LED is less than one year

- **Environmental friendly**
  No mercury and less waste: Small carbon footprint

For more information,
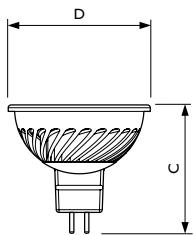**visit www.philips.com/masterled**

MASTER LED & the GLS Ban

From September 2009 the EU will begin the phase-out of inefficient GLS lamps. Philips already offers an extended LED retrofit portfolio with high quality solutions. MASTER LED is the best alternative to incandescent lamps with energy savings up to 80%.
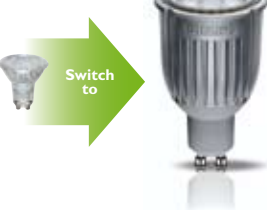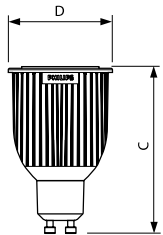

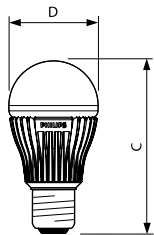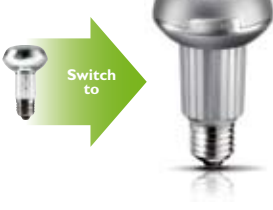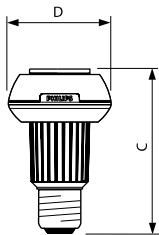| MASTER LED MR16	MASTER LED GU10	MASTER LED E27 A55	MASTER LED E27 NR63
Replacement for 20W standard dichroic halogen 12V lamps	Replacement for 35W standard dichroic halogen 230V lamps	Replacement for max 40W incandescent lamps	Replacement for max 50W incandescent lamps
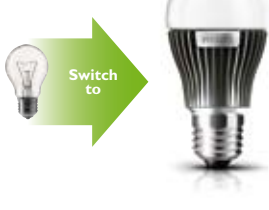
Product	Dimmable	Colour temp. (K)	Colour rendering (Ra)	Lumen output (Lm)	Beam Intensity (Cd)	Beam angle	Dimensions C (mm)	D (mm)	Packing unit	EOC 8727900…
MASTER LED 7W A55 230-240V	•	4200	70	230	-	-	106,5	55,5	6/box	82848100
MASTER LED 7W A55 230-240V	•	3000	85	180	-	-	106,5	55,5	6/box	82850400
MASTER LED 7W A55 230-240V[1]	•	2700	85	180	-	-	106,5	55,5	6/box	82860300
MASTER LED 7W NR63 230-240V	•	4200	85	-	800	25	101	63,3	6/box	82852800
MASTER LED 7W NR63 230-240V	•	3000[2]	70	-	575	25	101	63,3	6/box	83298300
MASTER LED 7W NR63 230-240V	•	4200	85	-	320	40	101	63,3	6/box	82856600
MASTER LED 7W NR63 230-240V	•	3000[2]	85	-	230	40	101	63,3	6/box	83300300
MASTER LED 7W GU10 230-240V	•	4200	70	-	800	25	80,5	50,2	6/box	82862700
MASTER LED 7W GU10 230-240V	•	3000	85	-	575	25	80,5	50,2	6/box	82864100
MASTER LED 7W GU10 230-240V[1]	•	2700	85	-	575	25	80,5	50,2	6/box	82870200
MASTER LED 7W GU10 230-240V	•	4200	70	-	320	40	80,5	50,2	6/box	82866500
MASTER LED 7W GU10 230-240V	•	3000	85	-	230	40	80,5	50,2	6/box	82868900
MASTER LED 7W GU10 230-240V[1]	•	2700	85	-	230	40	80,5	50,2	6/box	82872600
MASTER LED 4W GU5.3 MR16 12V	•[3]	3000	85	-	550	24	46,1	50,1	10/box	81958800
MASTER LED 4W GU5.3 MR16 12V	•[3]	2700	90	-	550	24	46,1	50,1	10/box	81956400

[1] Will be introduced July 2009

[2] 3000K will be phased out in June 2009 and will be succeeded in July 2009 by the 2700K. (2700K/ 25D EOC 82854200, 2700K/ 40D EOC 8285800)

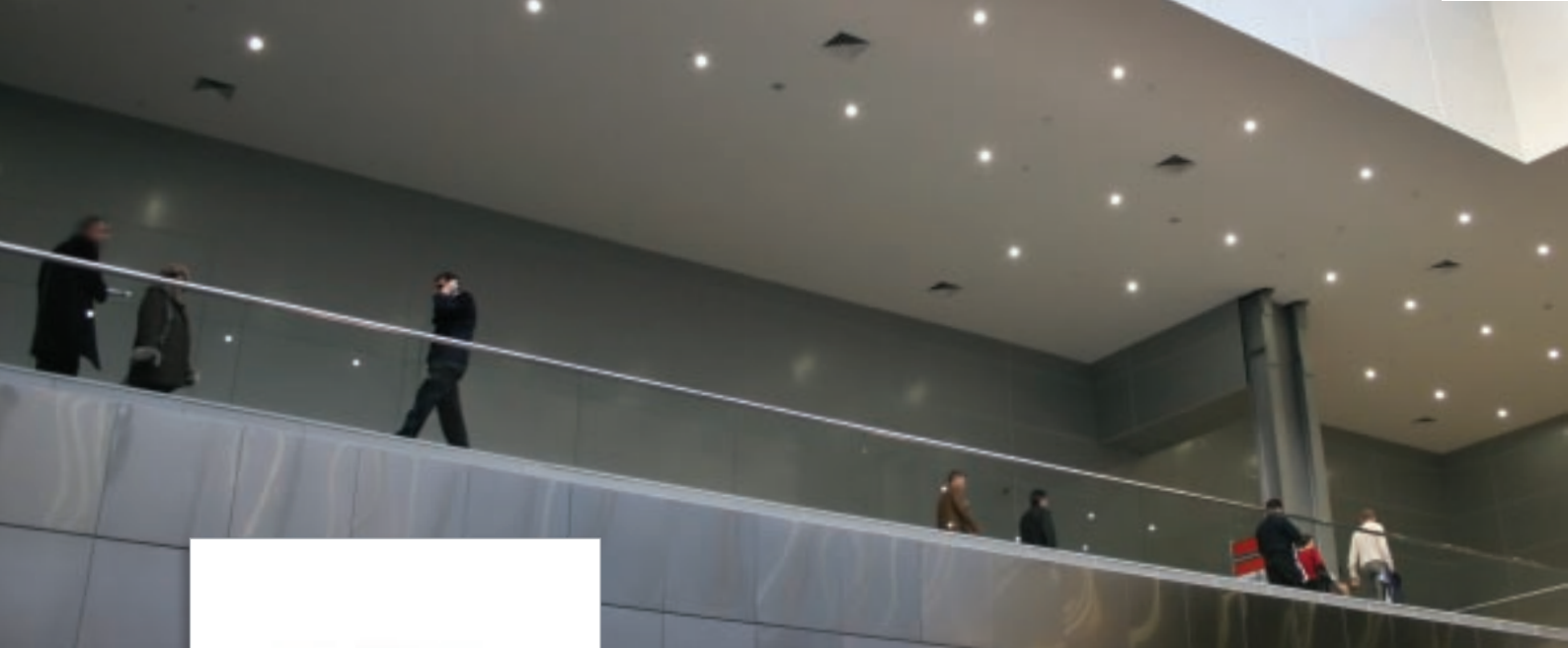[3] 2 Step dimmable. For more information, visit www.philips.com/masterled

BBS480

BBS481

LuxSpace

The highly energy-efficient LuxSpace makes it possible to achieve extremely low power consumption without sacrificing light quality in general lighting applications. Designed for 150 mm cut-outs, LuxSpace offers a compact look and feel. Suitable for hospitality, office and retail lighting applications.
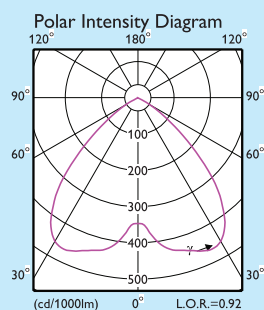
Features and benefits

- Energy saving
  Consumes only 19W with a system efficacy reaching 60lm/W . It delivers a light output equivalent to 2x18W compact fluorescent lamps and saves up to 50% in energy

- Advanced remote phosphor technology
  Features the latest LED remote phosphor technology, delivering consistent light output, stable color performance and high color rendering (Ra>80)

- Good glare control
  The UGR19 version comes with a glare control ring to provide a comfortable light ambiance

- Easy installation, no maintenance
  Its easy installation coupled with a long lifetime of 50,000 hours means an end to the hassle of re-lamping – a true 'fit and forget' solution
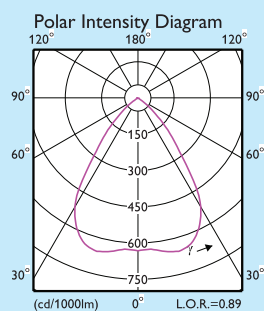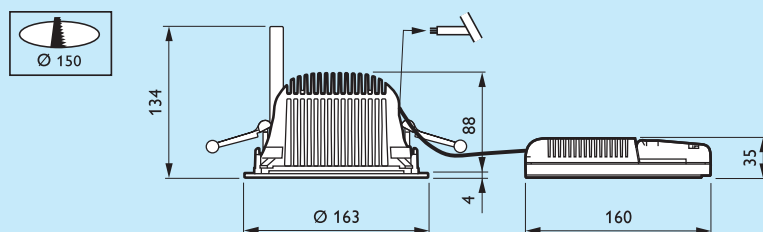
PHILIPS

LuxSpace

BBS480 1XDLED-3000 PSU-E WH

Polar Intensity Diagram

(cd/1000lm) L.O.R.=0.92

BBS481 1XDLED-3000 PSU-E WH

Polar Intensity Diagram

(cd/1000lm) L.O.R.=0.89

Dimension Drawings

Ø 150

134

88

4

35

Ø 163

160

Specifications

	BBS480	BBS481 (Comfort version)
Light source	1 x LED-HB unit	
Light color	Neutral white: 4000K Warm white: 3000K	
Beam angle	100°	65°
Luminous flux	1131 lm (4000K) 1095 lm (3000K)	1012 lm (4000K) 979lm (3000K)
Power requirement	220~240V AC, 50~60Hz Integrated into independent driver box	
Power consumption	19W	
System efficacy	60lm/W (4000K) 58lm/W(3000K)	53lm/W (4000K) 52lm/W(3000K)
Optic	High-gloss mirror, UGR22	High-gloss mirror with ring louver, UGR19
Color rendering index (Ra)	80	
Installation	Recessed; fixation by means of spring fasteners	
Material	Heat sink, bracket, reflector and front rim: aluminum Fixation: steel and polycarbonate Driver box: steel	
Classification	Class 1, IP20, 960 °C, F; Ambient temperature: -20°C to 35°C	
Control interface	Switches or dimming by DALI	
Option	Connection: Wieland (W) or Push-in (PI) Ring color: White (WH) or grey (GR) Accessories: Adaptor ring 150 mm to 175 mm cut-out diameter Emergency lighting	
Lifetime	50,000 hours, 70% lumen maintenance at Ta=25°C	

eW Cove Powercore

An EssentialWhite™ Product

eW® Cove Powercore is a dimmable, line-voltage, linear light fixture for common medium-luminance alcove applications. Its low profile makes it a perfect choice for many retail, exhibit, hospitality, and architectural interior settings.

Runs of up to 100 linear feet on a single circuit are possible as well as very smooth dimming. An integrated mounting bracket, end-to-end connections, and an optional mounting track ensure a simple, fast installation.
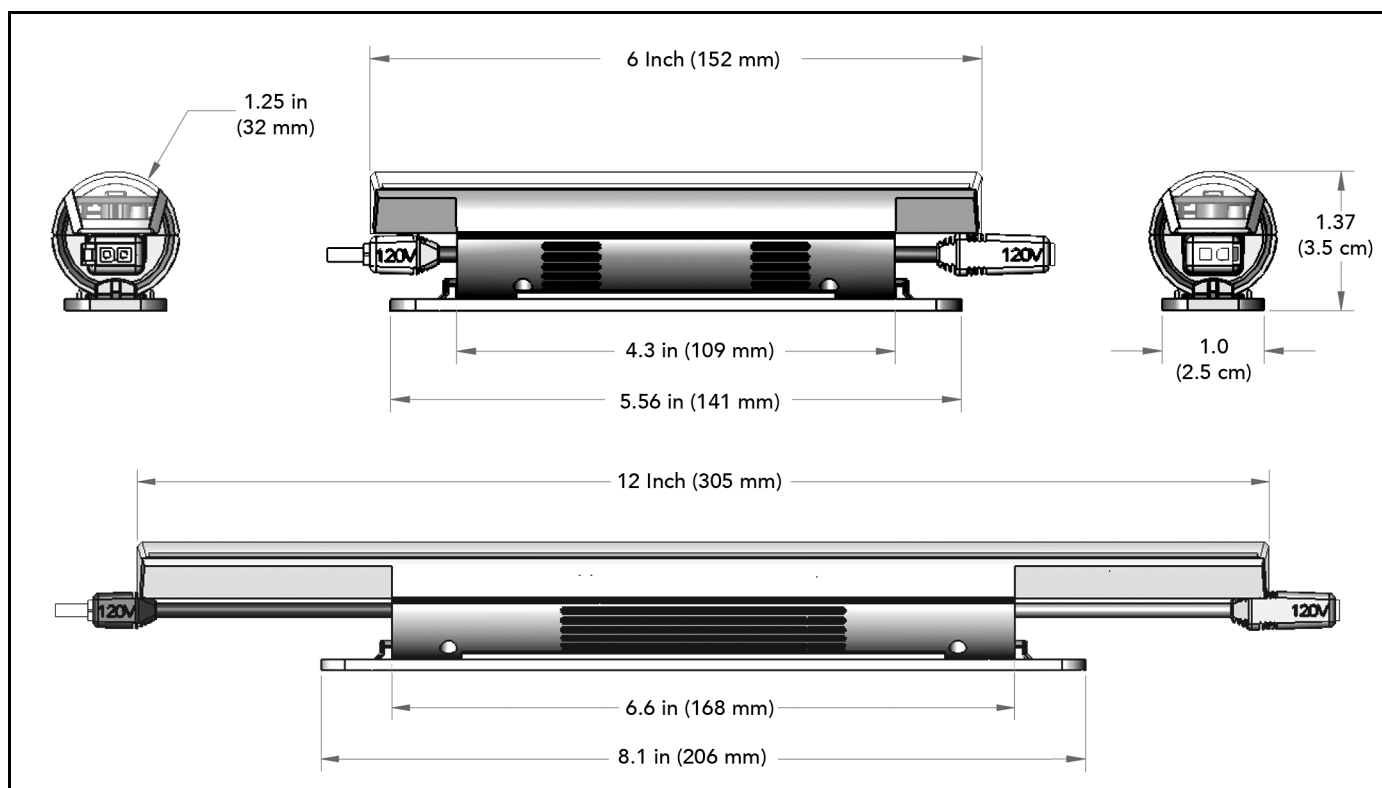
- Integral mounting bracket with 180° rotation
- Low power consumption (<6 W start-up; 4.5 W steady-state)
- End-to-end connections
- Color temperatures of 2800 K and 4200 K
- Sizes of 12 in (305 mm) and 6 in (152 mm)
- Up to 100 12 Inch or 150 6 Inch fixtures may be used in a series

- Powercore® technology supports 100, 120, and 230 VAC line voltage for simple installations and long runs
- DIMand™ technology provides smooth dimming capability with ELV-type dimmers
- Optibin® technology ensures uniform light quality

OPTIBIN®
CK TECHNOLOGY

POWERCORE®
CK TECHNOLOGY

DIMAND™
CK TECHNOLOGY

c (UL) us
LISTED

CE

PHILIPS

eW Cove Powercore Dimensions

6 Inch (152 mm)

1.25 in
(32 mm)

1.37
(3.5 cm)

4.3 in (109 mm)

1.0
(2.5 cm)

5.56 in (141 mm)

12 Inch (305 mm)

6.6 in (168 mm)

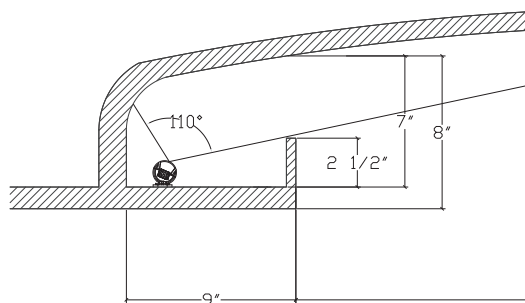8.1 in (206 mm)

eW Cove Powercore Beam Angle

110°   110°

Typical Installation Cut-Away

eW Cove Powercore fixtures can be used in a variety of cove sites. A typical setup is shown below.

110°   7"   8"

2 1/2"

9"

eW Cove Powercore Specifications

Specifications are subject to change without notice.

	6-Inch Fixture	12-Inch Fixture
Length	6 in (152 mm)	12 in (305 mm)
Width	1.25 in (32 mm) (tube diameter)	
Height	1.37 in (35 mm)	
Weight	3 oz. (85 g)	5 oz. (142 g)
Source	High-efficacy (>40 LPW), high-brightness LEDs that enable eW Cove Powercore installations to meet California Title 24 requirements.	
Color Temperature	2800 K (+375/-300) or 4200 K (+400/-500)	
LEDs Per Fixture	3	5
CRI	71: 2800 K 79: 4200 K	71: 2800 K 77: 4200 K
Total Output (Lumens)	64: 2800 K 72: 4200 K	135: 2800 K 177: 4200 K
Efficacy (Lm/W)	30.7: 2800 K 39.3: 4200 K	30.7: 2800 K 39.3: 4200 K
Beam Angle	110° x 110°	
Mixing Distance	2 in (51 mm) to uniform light	
Housing	Charcoal gray, UL-recognized, injection-molded plastic.	
Lens	Clear polycarbonate	
Environment	UL Dry; CE IP20	
Inter-fixture Connectors	IEC 15 A (max) with C13 plug	
Maximum Run Length	150 fixtures	100 fixtures
Leader Cable	2-pole, 2-wire, 15 A (sold separately)	
Listings	UL/CUL (120 VAC), CE	
Control	Line switches or ELV (electronic low voltage) commercially-available dimmers.	
Line Voltage	100, 120, or 230 VAC	
Power Consumption	4 W max. at start-up 2.2 W max. steady state	6 W max. at start-up 4.5 W max. steady state
Temperature Range	-4°F – 122°F (-20°C – 50°C) operating temperature	
Humidity Range	0 – 95% non-condensing	
LED Source Life	50,000 hours, based on LED manufacturers' test data	

eW Cove Powercore Ordering Information

eW Cove Powercore Item Numbers

Voltage	Size	Color Temp.	Item Number	Part Number
100 VAC	12 Inch (305 mm)	2800 K	523-000004-02	910503700203
		4200 K	523-000004-05	910503700204
	6 Inch (152 mm)	2800 K	523-000005-02	910503700205
		4200 K	523-000005-05	910503700206
120 VAC	12 Inch (305 mm)	2800 K	523-000004-00	910403600103
		4200 K	523-000004-03	910403600104
	6 Inch (152 mm)	2800 K	523-000005-00	910403600105
		4200 K	523-000005-03	910403600106
230 VAC	12 Inch (305 mm)	2800 K	523-000004-01	910403325701
		4200 K	523-000004-04	910403325801
	6 Inch (152 mm)	2800 K	523-000005-01	910403325501
		4200 K	523-000005-04	910403325601

Accessories for eW Cove Powercore Fixtures

Use one leader cable to connect line power to a series of fixtures. Each leader cable includes a terminator that must be installed in the last fixture in the series. Jumper cables and tracks are optional.

Leader Cable	Item Number	Part Number
10 ft (3 m) UL-listed leader cable for permanent installations	108-000032-00	910403600100
10 ft (3 m) CE approved leader cable	108-000032-02	910403325901

Jumper Cable	Item Number	Part Number
1 ft (305 mm) UL-listed jumper cable — provides spacing between series segments	108-000033-00	910403600101
5 ft (1.5 m) UL-listed jumper cable — provides spacing between series segments	108-000033-01	910403600102
1 ft (305 mm) CE approved jumper cable — provides spacing between series segments	108-000033-02	910403326001
5 ft (1.5 m) CE approved jumper cable — provides spacing between series segments	108-000033-03	910403326101

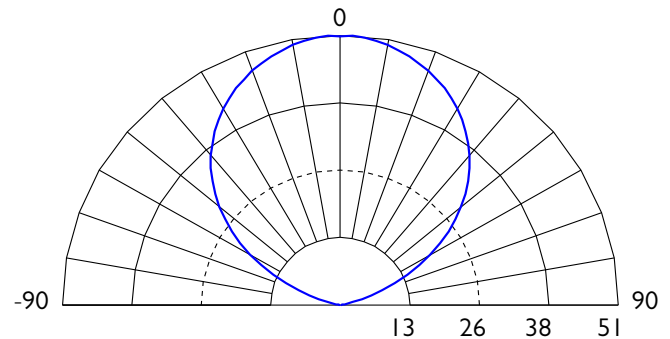| Mounting Tracks	Item Number	Part Number
Box of 25 4 ft (1219 mm) mounting tracks — aligns straight runs of fixtures	523-000006-00	910403326201

eW Cove Powercore 12-Inch 2800 K Photometrics

Photometric data in each illustration is based on independent testing lab results. IES data is available at http://www.colorkinetics.com/support/ies. The tested fixture had these specifications:

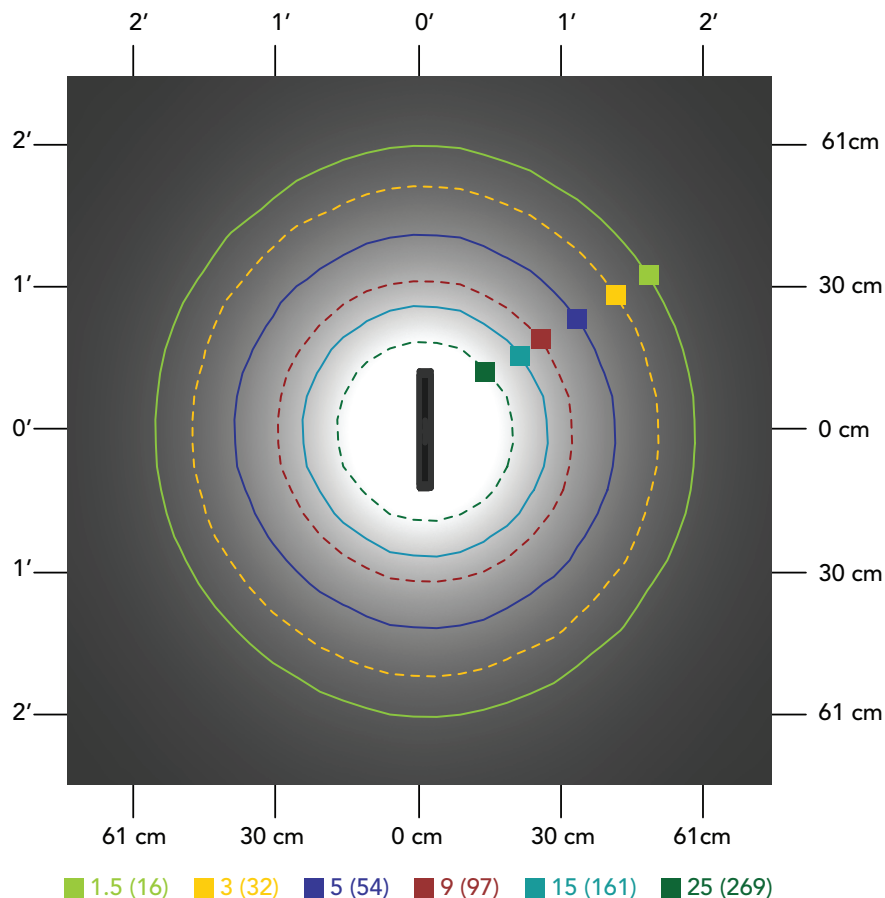|	
Voltage	120 VAC
Optics	None
Lens	Optically clear polycarbonate
Source	5 LEDs
Beam Angle	110° x 110°
Distribution	Symmetric direct illumination

Candle Power Distribution

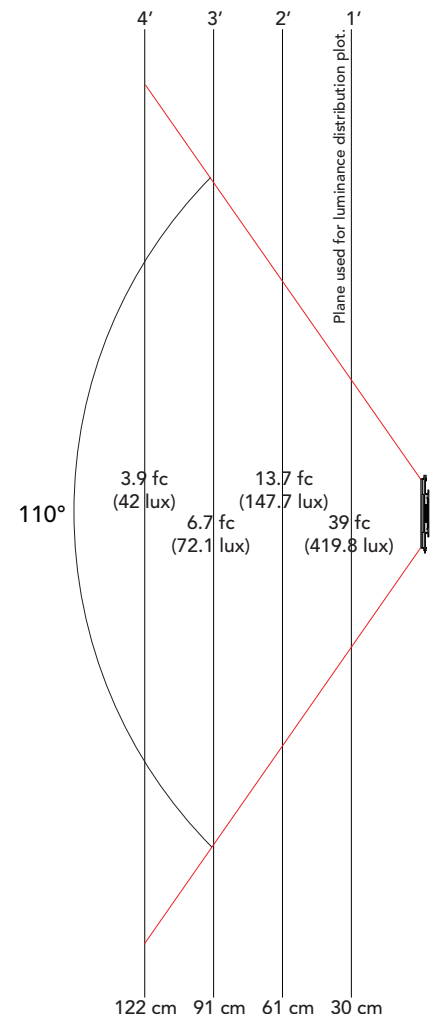The dashed line indicates that 26 candela is 50% of peak.

Illuminance Distribution

This illustration shows the plane 1 ft (305 mm) from the fixture. Data is in footcandles and (lux).

1.5 (16)   3 (32)   5 (54)   9 (97)   15 (161)   25 (269)

Illuminance Beam Angle

This illustration shows measurement of the center beam and the fixture's angle. Data is in footcandles and (lux).

110°

2.9 fc (31 lux)   5.0 fc (54 lux)   10.2 fc (110 lux)   30.6 fc (329 lux)

122 cm   91 cm   61 cm   30 cm

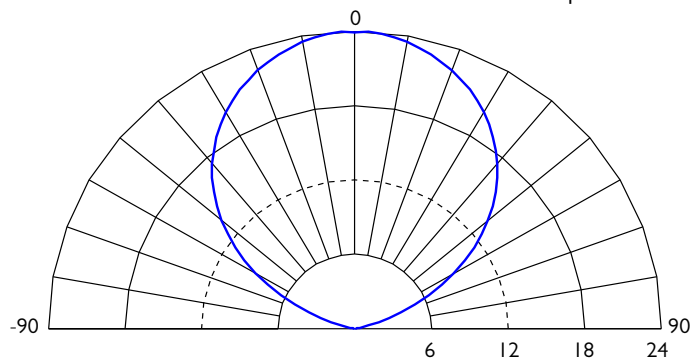Plane used for luminance distribution plot.
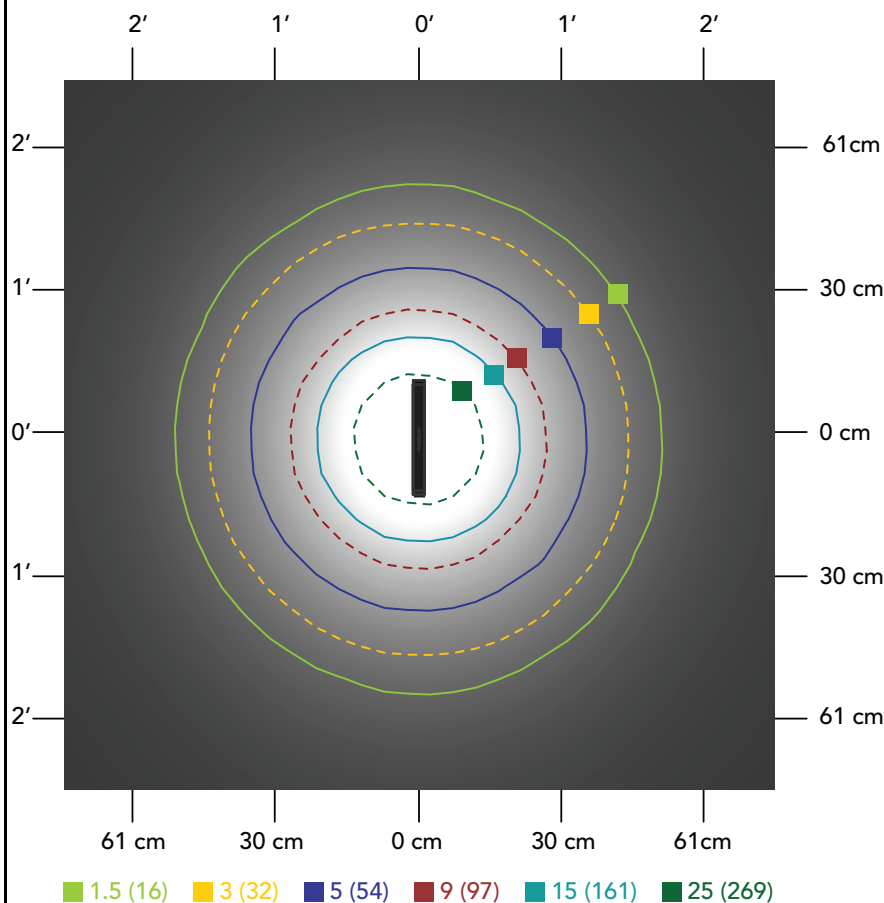
eW Cove Powercore 12-Inch 4200 K Photometrics

Photometric data in each illustration is based on independent testing lab results. IES data is available at http://www.colorkinetics.com/support/ies. The tested fixture had these specifications:

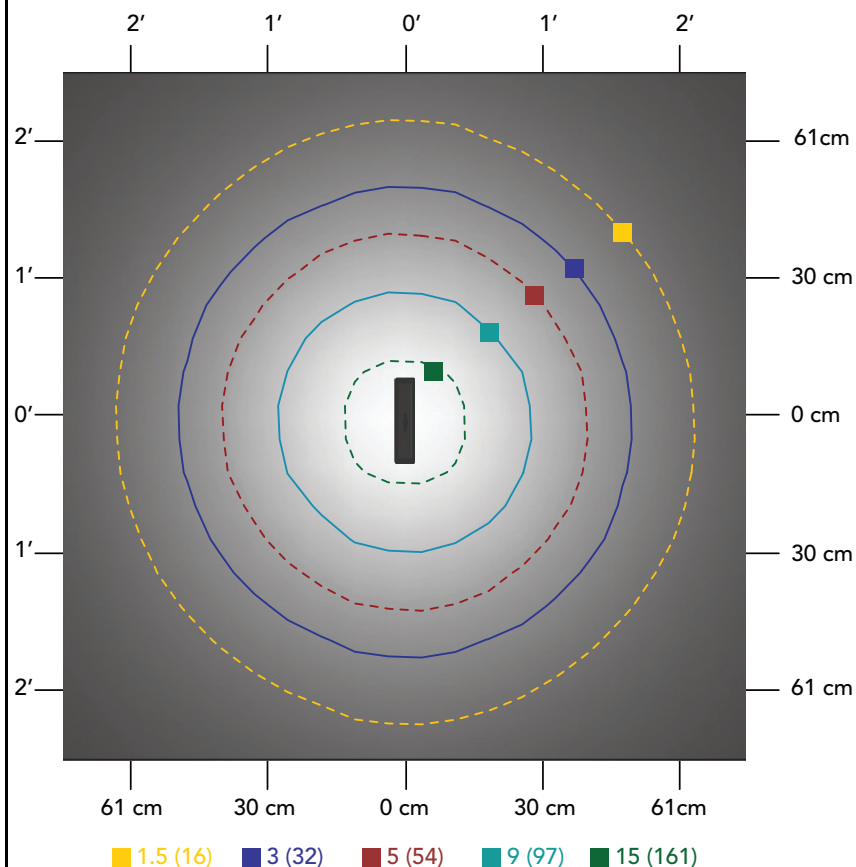|	
Voltage	120 VAC
Optics	None
Lens	Optically clear polycarbonate
Source	5 LEDs
Beam Angle	110° x 110°
Distribution	Symmetric direct illumination

Candle Power Distribution

The dashed line indicates that 34 candela is 50% of peak.
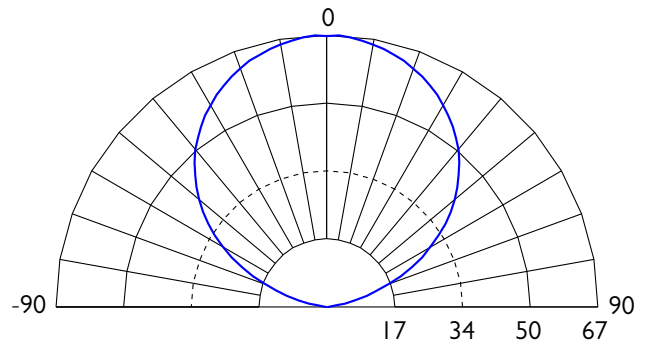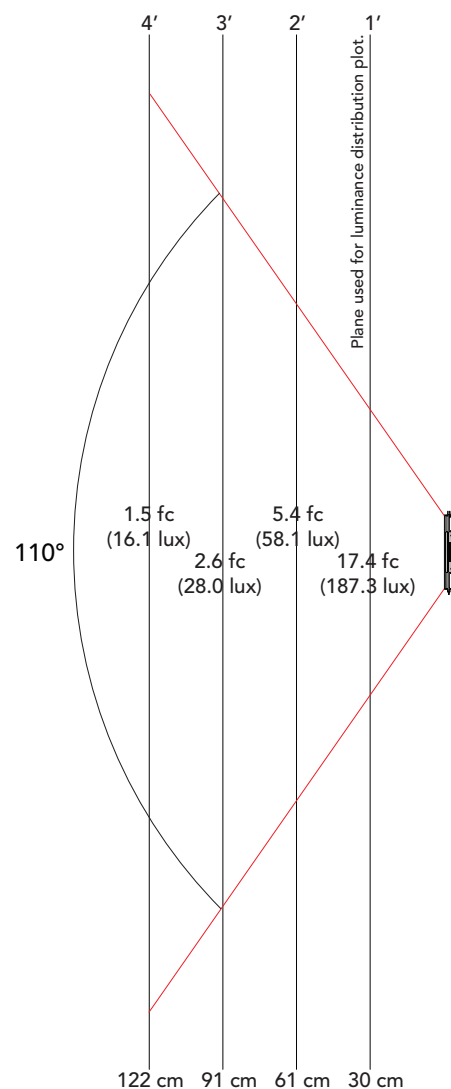

Iluminance Distribution

This illustration shows the plane 1 ft (305 mm) from the fixture. Data is in footcandles and (lux).

Illuminance Beam Angle

This illustration shows measurement of the center beam and the fixture's angle. Data is in footcandles and (lux).

■ 1.5 (16)　■ 3 (32)　■ 5 (54)　■ 9 (97)　■ 15 (161)　■ 25 (269)

Plane used for luminance distribution plot.

110°

3.9 fc (42 lux)　13.7 fc (147.7 lux)
6.7 fc (72.1 lux)　39 fc (419.8 lux)

122 cm 91 cm 61 cm 30 cm

eW Cove Powercore 6-Inch 2800 K Photometrics

Photometric data in each illustration is based on independent testing lab results. IES data is available at http://www.colorkinetics.com/support/ies. The tested fixture had these specifications:

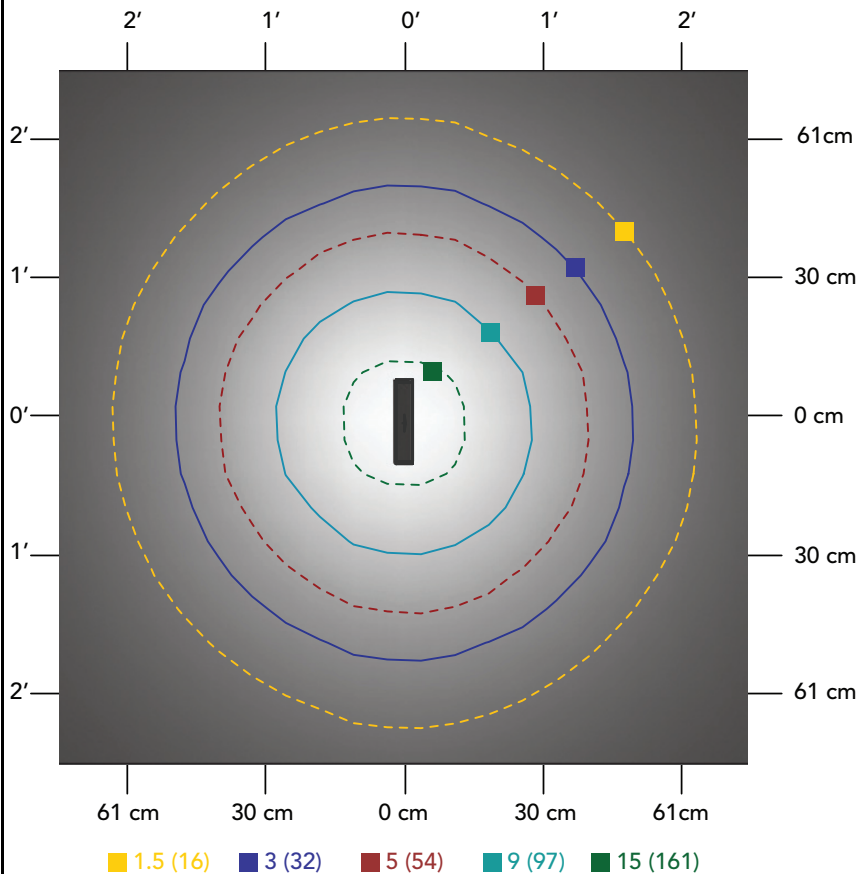|	
Voltage	120 VAC
Optics	None
Lens	Optically clear polycarbonate
Source	3 LEDs
Beam Angle	110° x 110°
Distribution	Symmetric direct illumination

Candle Power Distribution

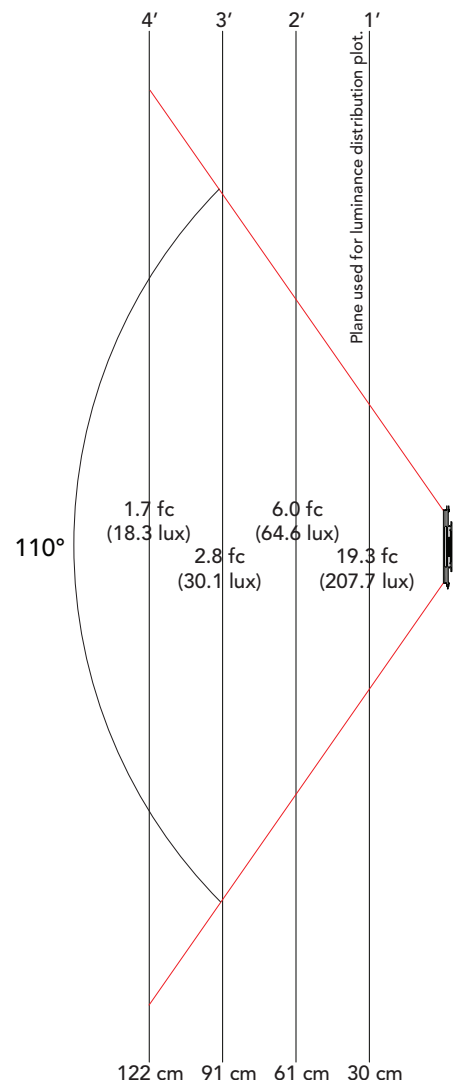The dashed line indicates that 12 candela is 50% of peak.

Iluminance Distribution

This illustration shows the plane 1 ft (305 mm) from the fixture. Data is in footcandles and (lux).

■ 1.5 (16)　■ 3 (32)　■ 5 (54)　■ 9 (97)　■ 15 (161)

Illuminance Beam Angle

This illustration shows measurement of the center beam and the fixture's angle. Data is in footcandles and (lux).

Plane used for luminance distribution plot.

110°

1.5 fc (16.1 lux)
5.4 fc (58.1 lux)
2.6 fc (28.0 lux)
17.4 fc (187.3 lux)

122 cm　91 cm　61 cm　30 cm

eW Cove Powercore 6-Inch 4200 K Photometrics

Photometric data in each illustration is based on independent testing lab results. IES data is available at http://www.colorkinetics.com/support/ies. The tested fixture had these specifications:

Voltage	120 VAC
Optics	None
Lens	Optically clear polycarbonate
Source	3 LEDs
Beam Angle	110° x 110°
Distribution	Symmetric direct illumination

Candle Power Distribution

The dashed line indicates that 14 candela is 50% of peak.
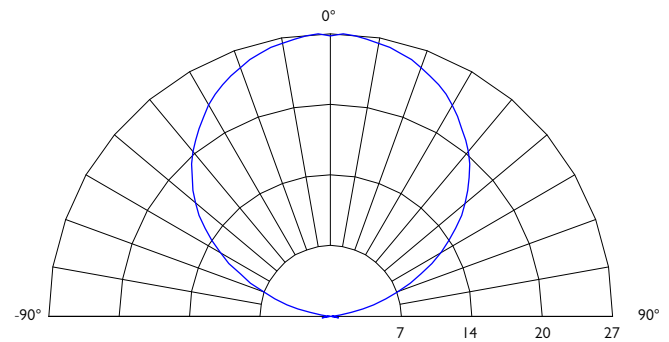
Iluminance Distribution

This illustration shows the plane 1 ft (305 mm) from the fixture. Data is in footcandles and (lux).

Legend: 1.5 (16)   3 (32)   5 (54)   9 (97)   15 (161)

Illuminance Beam Angle

This illustration shows measurement of the center beam and the fixture's angle. Data is in footcandles and (lux).

Plane used for luminance distribution plot.

4'   3'   2'   1'

110°

1.7 fc (18.3 lux)
2.8 fc (30.1 lux)
6.0 fc (64.6 lux)
19.3 fc (207.7 lux)

122 cm   91 cm   61 cm   30 cm

Installation Details

Mounting Track

Four-foot sections of mounting track align straight runs of eW Cove Powercore fixtures. Cut the track to size and mount it to the cove substrate. Then snap the fixtures into the track, adjust its position, and attach the fixtures to the substrate (through the track) to lock them into position.

Supported Dimmers

Use standard line switches or electronic low voltage (ELV) dimmers (commercially available trailing edge or reverse phase control units) to control a series of fixtures.

Leader Cable and Series Terminators

A leader cable (upper left in Figure 2) supplies line voltage to the first fixture in the series. Lights are interconnected with keyed male/female connectors and can be spaced with 1 ft (305 mm) or 5 ft (1524 mm) jumper cables to build the series. A power terminator is installed on the last fixture (below right).

Series Length

A single series can include up to 100 12 in (305 mm) fixtures or 150 6 in (152 mm) fixtures.

Fixture Spacing

There is about an inch of horizontal play in each pair of fixtures' connectors, so the fixtures must be spaced end-to-end or with about 4.5 in (114 mm) between mounting holes in the fixture brackets. Although horizontal spacing is fixed, there is enough cable to make a greater-than-180° turn between fixtures. Use the one or five-foot jumper cables to add more distance between fixtures.
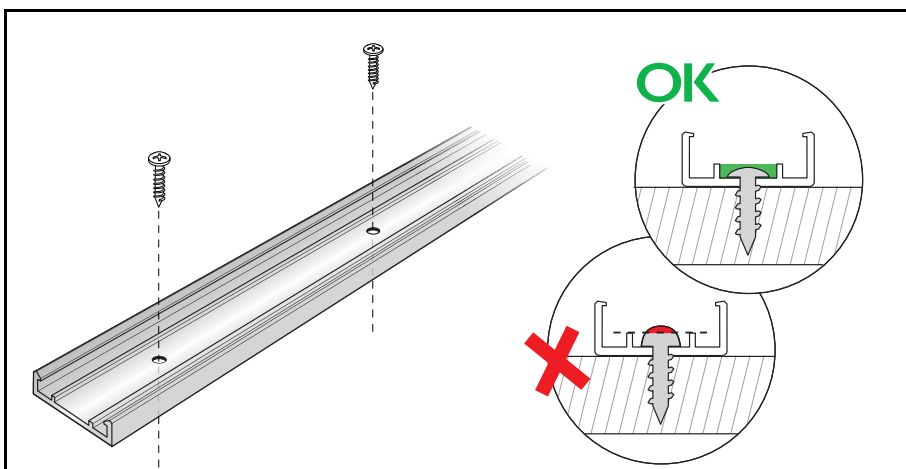

Figure 1: Optional Track Installation Detail *Ensure that the screw heads are below the internal track rails.*
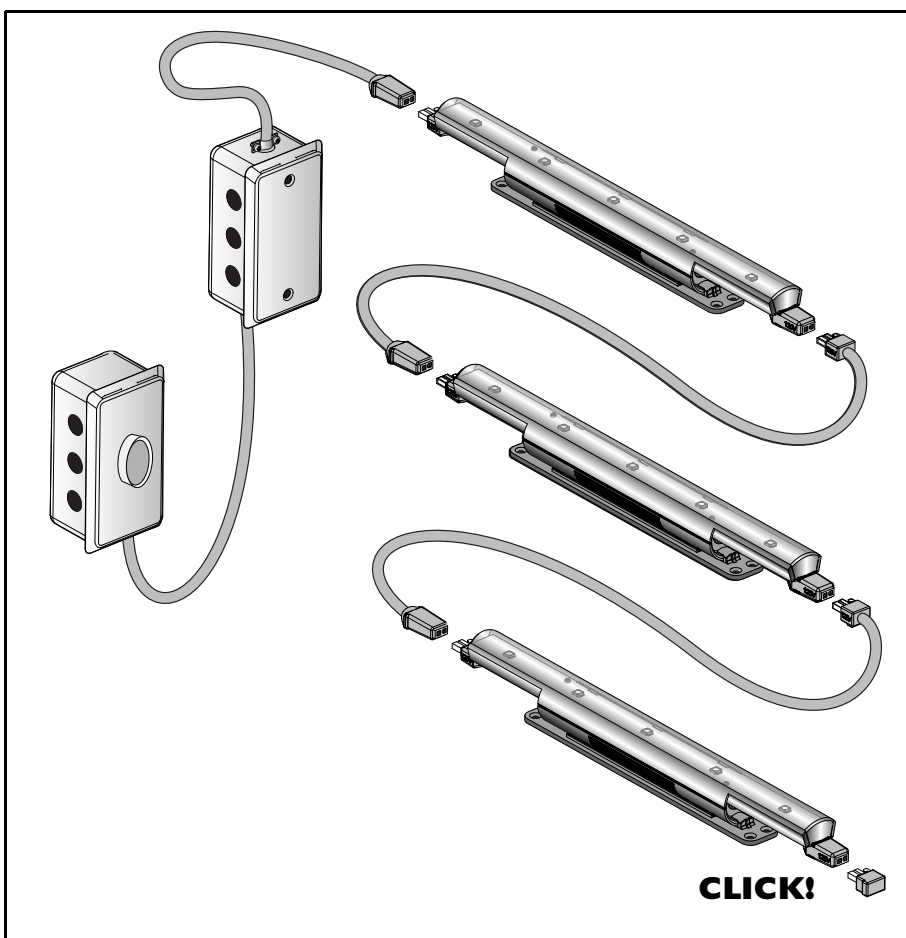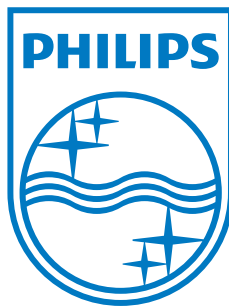

Figure 2: Leader Cable and Terminator Attachment

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Tel: 617.423.9999 • Tel: 888 FULL RGB (385.5742) • FAX: 617.423.9998 • www.colorkinetics.com