eW Burst Powercore gen2, Forward Throw Asymmetric

Architectural and landscape forward throw asymmetric LED spotlight with solid white light

PHILIPS

COLOR KINETICS

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eW Burst Powercore gen2, Forward Throw Asymmetric is a high output, exterior rated LED luminaire designed for accent and site lighting. eW Burst Powercore gen2, FTA provides uniform lighting across large surfaces and increases application efficiency by directing more light on a specific target. Architectural and Landscape versions deliver high-quality white light output in 2700 K, 3000 K, 3500 K and 4000 K to support a range of uplighting, floodlighting, and decorative lighting applications.

- Uniform illumination—eW Burst Powercore gen2, FTA delivers a uniformity ratio of 3.7:1, see below on a 6 m (19.7 ft) wall with a 1 m (3.3 ft) setback.

- Precise control of light—Asymmetric optic design provides precise control of light and delivers more illumination with higher uniformity at a lower power than comparable fluorescent asymmetric reflector solutions.

- Design flexibility—eW Burst Powercore gen2, FTA is designed to adapt to its surroundings regardless of the wall height, setback, or spacing of an installation.

- Expands customization with a wide range of new Philips accessory options. Four housing color choices (black, gray, white, and bronze)—plus the option to add a trim ring, half glare shield, and an architectural mounting arm designed for use on buildings—create new aesthetic possibilities for designers and architects.

- Meets ASTM G85 corrosion resistance and ANSI C136.31-2010 standard with a 3G vibration rating.

- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage – rapidly, efficiently, and accurately. The Philips Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.

- Improves durability with new flat lens that prevents water from pooling into the luminaire, keeping the LEDs protected and secure over the course of a luminaire's lifetime.

- Universal power input range of 100 to 277 VAC.

- Precision Dimming—Smooth dimming down to 1% with optional Data Enabler Pro and digital control interface.

- Works seamlessly with the Philips Color Kinetics full range of controllers, including Light System Manager, Video System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro—as well as third-party controllers.

Two Versions

eW Burst Powercore gen2, FTA Architectural luminaires feature an integrated yoke with canopy base for mounting to standard US junction boxes or directly to flat surfaces. eW Burst Powercore gen2 Landscape luminaires feature a 1/2 in NPT threaded post for mounting to standard junction boxes and third-party mounting accessories.
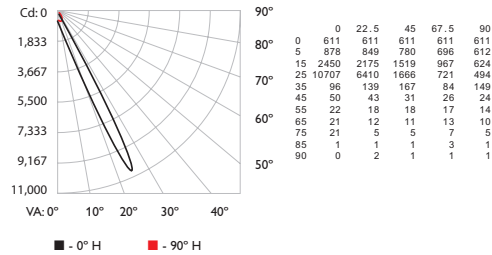
Photometrics

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.
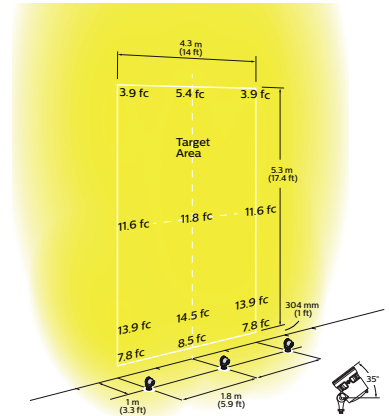
eW Burst Powercore gen2, FTA 2700 K

Lumens	1,247
Efficacy	44.6
CRI	81
Target Area Uniformity	3.7:1

Polar Candela Distribution

	0	22.5	45	67.5	90
0	611	611	611	611	611
5	878	849	780	696	612
15	2450	2175	1519	967	624
25	10707	6410	1666	721	494
35	96	139	167	84	149
45	50	43	31	26	24
55	22	18	18	17	14
65	21	12	11	13	10
75	21	5	5	7	5
85	1	1	1	3	1
90	0	2	1	1	1

■ - 0° H   ■ - 90° H

Zonal Lumen

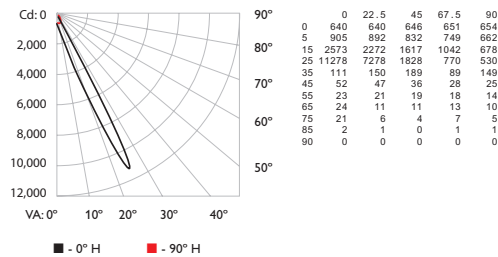| Zone	Lumens	% Luminaire
0-30	1,057.2	84.0%
0-40	1,182.8	94.0%
0-60	1,231.8	97.9%
60-90	19.8	1.6%
70-100	9.3	0.7%
90-120	2.4	0.2%
0-90	1,251.7	99.4%
90-180	7.0	0.6%
0-180	1,258.7	100.0%

eWBurst Powercore gen2 Forward Throw Asymmetric Notes. Although this luminaire is designed to meet a large number of installation needs, specifically wall heights, we recommend using a measurement area like the example with a measurement grid of 4.3 m (14 ft) or smaller. This approach will help you consistently create simulations that match mock-ups. In order to achieve the highest delivered illuminance and maximum level of uniformity, we recommend aiming the luminaire at a 35° rotation.
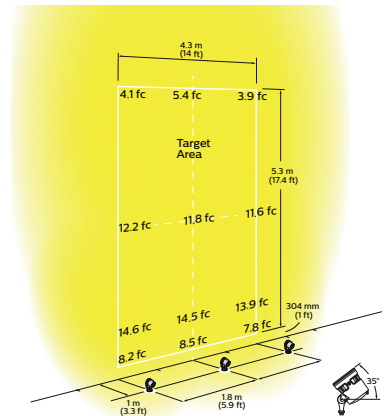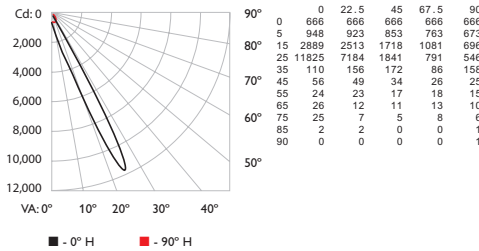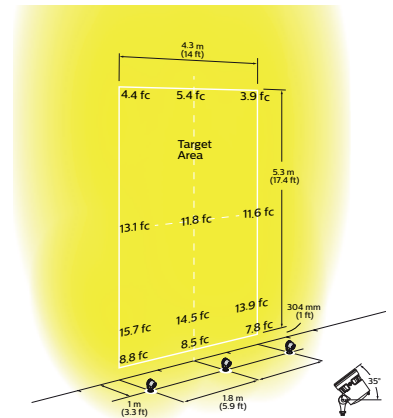
eW Burst Powercore gen2, FTA 3000 K

Lumens	1,297
Efficacy	48.3
CRI	83
Target Area Uniformity	3.7:1

Polar Candela Distribution

	0	22.5	45	67.5	90
0	640	640	646	651	654
5	905	892	832	749	662
15	2573	2272	1617	1042	678
25	11278	7278	1828	770	530
35	111	150	189	89	149
45	52	47	36	28	25
55	23	21	19	18	14
65	24	11	11	13	10
75	21	6	4	7	5
85	2	1	0	1	1
90	0	0	0	0	0

■ - 0° H   ■ - 90° H

Zonal Lumen

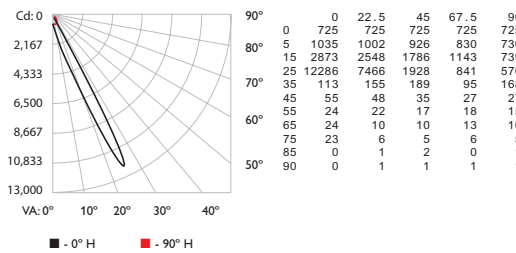| Zone	Lumens	% Luminaire
0-30	1,102.7	84.6%
0-40	1,233.3	94.6%
0-60	1,283.8	98.5%
60-90	19.9	1.5%
70-100	8.1	0.6%
90-120	-	0.0%
0-90	1,303.7	100.0%
90-180	-	0.0%
0-180	1,303.7	100.0%

eWBurst Powercore gen2 Forward Throw Asymmetric Notes. Although this luminaire is designed to meet a large number of installation needs, specifically wall heights, we recommend using a measurement area like the example with a measurement grid of 4.3 m (14 ft) or smaller. This approach will help you consistently create simulations that match mock-ups. In order to achieve the highest delivered illuminance and maximum level of uniformity, we recommend aiming the luminaire at a 35° rotation.
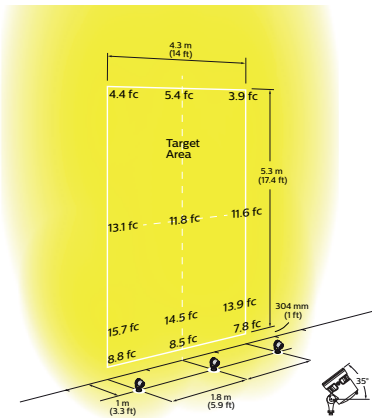
eW Burst Powercore gen2, FTA
3500 K

Lumens	1,427
Efficacy	49.9
CRI	81
Target Area Uniformity	3.7:1

Polar Candela Distribution

	0	22.5	45	67.5	90
0	666	666	666	666	666
5	948	923	853	763	673
15	2889	2513	1718	1081	696
25	11825	7184	1841	791	546
35	110	156	172	86	158
45	56	49	34	26	25
55	24	23	17	18	15
65	26	12	11	13	10
75	25	7	5	8	6
85	2	2	0	0	1
90	0	0	0	0	1

■ - 0° H   ■ - 90° H

Zonal Lumen

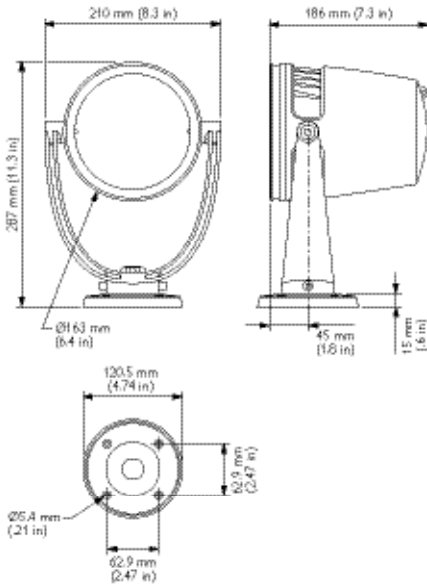| Zone	Lumens	% Luminaire
0-30	1,200.4	84.5%
0-40	1,338.6	94.2%
0-60	1,393.3	98.1%
60-90	21.9	1.5%
70-100	9.8	0.7%
90-120	1.6	0.1%
0-90	1,415.3	99.6%
90-180	5.5	0.4%
0-180	1,420.8	100.0%

eWBurst Powercore gen2 Forward Throw Asymmetric Notes. Although this luminaire is designed to meet a large number of installation needs, specifically wall heights, we recommend using a measurement area like the example with a measurement grid of 4.3 m (14 ft) or smaller. This approach will help you consistently create simulations that match mock-ups. In order to achieve the highest delivered illuminance and maximum level of uniformity, we recommend aiming the luminaire at a 35° rotation.
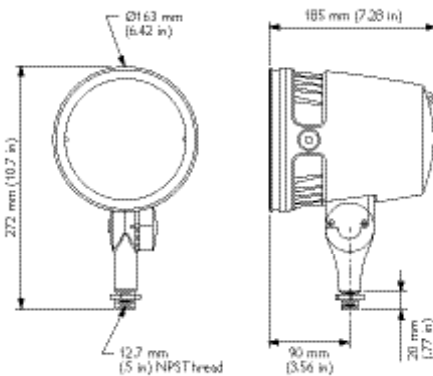
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eW Burst Powercore gen2, FTA
4000 K

Lumens	1,446
Efficacy	49.8
CRI	82
Target Area Uniformity	3.7:1

Polar Candela Distribution

	0	22.5	45	67.5	90
0	725	725	725	725	725
5	1035	1002	926	830	730
15	2873	2548	1786	1143	739
25	12286	7466	1928	841	576
35	113	155	189	95	168
45	55	48	35	27	27
55	24	22	17	18	15
65	24	10	10	13	10
75	23	6	5	6	5
85	0	1	2	0	1
90	0	1	1	1	1

■ - 0° H   ■ - 90° H

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,228.5	84.5%
0-40	1,370.7	94.3%
0-60	1,425.5	98.1%
60-90	21.1	1.5%
70-100	9.5	0.7%
90-120	2.0	0.1%
0-90	1,446.6	99.5%
90-180	6.6	0.5%
0-180	1,453.2	100.0%

eWBurst Powercore gen2 Forward Throw Asymmetric Notes. Although this luminaire is designed to meet a large number of installation needs, specifically wall heights, we recommend using a measurement area like the example with a measurement grid of 4.3 m (14 ft) or smaller. This approach will help you consistently create simulations that match mock-ups. In order to achieve the highest delivered illuminance and maximum level of uniformity, we recommend aiming the luminaire at a 35° rotation.

eW Burst Powercore gen2, FTA Specifications

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

Color Temperature*	Lumens†	Efficacy (lm/W)	CRI	Target Area Uniformity
2700 K	1,247	44.6	81	3.7:1
3000 K	1,297	48.3	83	3.7:1
3500 K	1,427	49.9	81	3.7:1
4000 K	1,446	49.8	82	3.7:1

Item	Specification	Details
Output	Effective Projected Area (EPA)	0.026 m² (0.28 ft²) (Luminaire plus Full Glare Shield)
Electrical	Input Voltage	100 to 277 VAC, auto-switching, 50/60 Hz via Data Enabler Pro
	Power Consumption	30 W maximum at full output, steady state
	Power Factor	> 0.9 @ 100 to 240 VAC, > 0.85 @ 277 VAC
Control ‡	Control System	ON/OFF; precision dimming by 4 conductor cable & Data Enabler Pro
Physical	Dimensions (Height x Width x Depth)	287 x 210 x 186 mm (11.3 x 8.3 x 7.3 in) Architectural
		272 x 163 x 185 mm (10.7 x 6.42 x 7.28 in) Landscape
	Weight	5.5 kg (12.1 lb) Architectural 3.5 kg (7.7 lb) Landscape
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Clear tempered glass
	Luminaire Connections	1.8 m (6 ft) combined power data whip Architectural 152 mm (6 in) flying leads Landscape
	Temperature Ranges	-40 to 50 °C (-40 to 122 °F) Operating -20 to 50 °C (-4 to 122 °F) Startup -40 to 80 °C (-40 to 176 °F) Storage
	Humidity	0 to 95%, non-condensing
	Luminaire Run Lengths	To calculate luminaire 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, CQC, RCM
	Environment	Dry/Damp/Wet Location, IP66
	Corrosion Resistance	Complies with ASTM B117 standard for > 1,500 hours
	Vibration Resistance	Complies with ANSI C136.31, 3G Architectural
	Mechanical Impact	IK08

Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated
L90	@ 25°C	>51,000 hrs	72,000 hrs
	@ 50°C	25,000 hrs	25,000 hrs
L80	@ 25°C	>51,000 hrs	>100,000 hrs
	@ 50°C	51,000 hrs	51,000 hrs
L70	@ 25°C	>51,000 hrs	>100,000 hrs
	@ 50°C	>51,000 hrs	>80,000 hrs

* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

† Lumen output measurements comply with IES LM-79-08 testing procedures.

‡ Refer to www.philipscolorkinetics.com/support/appnotes/ for more information.

§ Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

eW Burst Powercore gen2, FTA Architectural

eW Burst Powercore gen2, FTA Landscape

Luminaires and Data Enabler Pro

Item	Type	CCT	Housing Color	Item Number*	Philips 12NC
eW Burst Powercore gen2, FTA	Landscape	2700 K	Gray	523-000101-00	912400135396
			Black	523-000101-03	912400135399
			White	523-000101-06	912400135403
			Bronze	523-000101-09	912400135406
		3000 K	Gray	523-000101-24	912400135421
			Black	523-000101-27	912400135424
			White	523-000101-30	912400135427
			Bronze	523-000101-33	912400135430
		3500 K	Gray	523-000101-36	912400135433
			Black	523-000101-39	912400135436
			White	523-000101-42	912400135439
			Bronze	523-000101-45	912400135442
		4000 K	Gray	523-000101-12	912400135409
			Black	523-000101-15	912400135412
			White	523-000101-18	912400135415
			Bronze	523-000101-21	912400135418
eW Burst Powercore gen2, FTA	Architectural	2700 K	Gray	523-000101-01	912400135397
			Black	523-000101-04	912400135401
			White	523-000101-07	912400135404
			Bronze	523-000101-10	912400135407
		3000 K	Gray	523-000101-25	912400135422
			Black	523-000101-28	912400135425
			White	523-000101-31	912400135428
			Bronze	523-000101-34	912400135431
		3500 K	Gray	523-000101-37	912400135434
			Black	523-000101-40	912400135437
			White	523-000101-43	912400135440
			Bronze	523-000101-46	912400135443
		4000 K	Gray	523-000101-13	912400135410
			Black	523-000101-16	912400135413
			White	523-000101-19	912400135416
			Bronze	523-000101-22	912400135419

Item	Style	Item Number*	Philips 12NC
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.

Accessories

Item	Housing Color	Item Number*	Philips 12NC	
Trim Ring	Gray	120-000189-20	912400135449	
	Black	120-000189-21	912400135450	
	White	120-000189-22	912400135451	
	Bronze	120-000189-23	912400135452	
Half Glare Shield	Gray	120-000189-24	912400135453	
	Black	120-000189-25	912400135454	
	White	120-000189-26	912400135455	
	Bronze	120-000189-27	912400135456	
Mounting Arm, Short*	Black	120-000201-00	912400135840	
Mounting Arm, Medium*	Black	120-000201-01	912400135841	
Mounting Arm, Long*	Black	120-000201-02	912400135842	
Mounting Arm, Short*	Gray	120-000201-03	912400135843	
Mounting Arm, Medium*	Gray	120-000201-04	912400135844	
Mounting Arm, Long*	Gray	120-000201-05	912400135845	
Mounting Arm, Short*	White	120-000201-06	912400135846	
Mounting Arm, Medium*	White	120-000201-07	912400135847	
Mounting Arm, Long*	White	120-000201-08	912400135848	

Use Item Number when ordering in North America.
*Mounting Arm does not meet ANSI C136.31-2010 standard with a 3G vibration rating.

Installation

eW Burst Powercore gen2, FTA offers solid white light LED spotlighting, site, and accent lighting with Powercore technology. Powercore, which integrates LED power and data management within the luminaire, 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 Burst Powercore gen2, FTA luminaires 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, it is good practice to seal all luminaires and junction boxes with electronics-grade RTV silicone sealant to ensure that moisture cannot enter or accumulate in any wiring compartments, cables, 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

Plan the Installation

1. Refer to the lighting design plan, architectural diagram, or other diagram that shows the physical layout of the installation to identify the locations of all switches, controllers, Data Enabler Pro devices, luminaires, and cables.

   eW Burst Powercore gen2 luminaires can be installed in series or in parallel (wired to a common junction box).

   • eW Burst Powercore gen2, FTA Architectural luminaires feature a canopy base for mounting to standard US junction boxes. Luminaires can be mounted directly to a surface or substrate by removing the nylon cable clamp and disengaging the 1.8 m (6 ft) integrated power/data cable from the canopy base.

   • eW Burst Powercore gen2, FTA Landscape luminaires feature a 1/2 in NPT threaded post for mounting to standard junction boxes and third-party mounting accessories such as stanchion mounts, posts, and stakes.
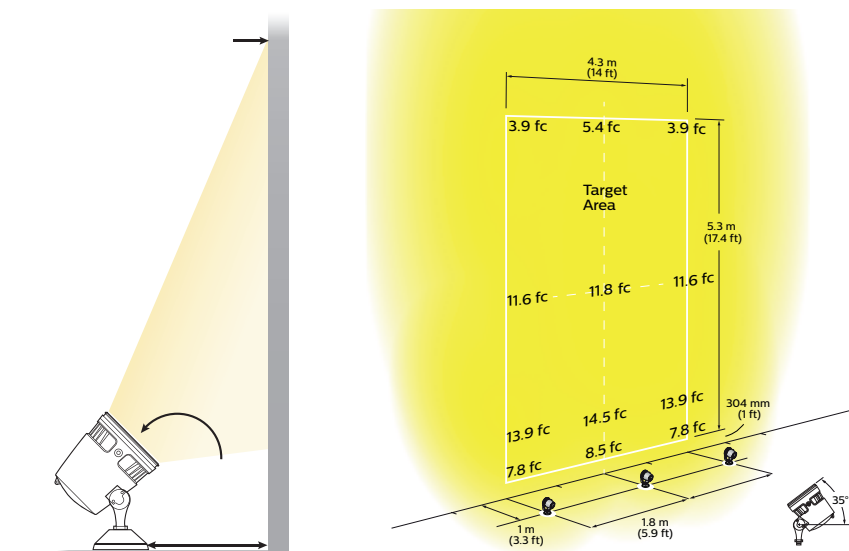
✳ *Refer to the eW Burst Powercore gen2, FTA Installation Instructions for specific warning and caution statements.*

✳ *eW Burst Powercore gen2 FTA luminaires can be installed in series with a recommended spacing/setback ratio of 1.8 m (6 ft) between luminaires. Each luminaire is connected to a third-party junction box using the 1.8 m (6 ft) hardwire cable.*

✳ *To streamline the configuration of complex installations, record the serial number (DMX) or IP address (Ethernet) and location of each Data Enabler Pro.*

Maximum luminaire run lengths

eW Burst Powercore gen2, FTA
1 channel
31 @ 100 VAC
38 @ 120 VAC
57 @ 220 VAC
58 @ 230 VAC
62 @ 227 VAC

Assuming a 20 A circuit, 6.1 m (20 ft) leader cable from Data Enabler Pro to the first junction box, and 610 mm (2 ft) jumper cables between luminaires

✳ *For more information, and for help calculating the number of luminaires your specific installation can support, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.*

The maximum number of luminaires each Data Enabler Pro can support depends on specific configuration details such as length of leader and jumper cables, wire gauge, luminaire spacing, circuit size, line voltage, and method of connection (in series or in parallel). As an example, the tables to the left list the maximum number of eW Burst Powercore gen2 Landscape luminaires each Data Enabler Pro can support at various voltages, assuming a 20 A circuit, a 6.1 m (20 ft) leader cable from Data Enabler Pro to the first junction box, and 610 mm (2 ft) jumper cables between luminaires. Keep in mind that these figures, provided as a guideline, are accurate for the specified configuration only. Changing the configuration can affect the luminaire run lengths.

Planning a Precision Dimming Installation

eW Burst Powercore gen2, FTA can be dimmed using a Data Enabler Pro setup. If you plan on precision dimming eW Burst Powercore gen2, FTA, you will need to plan out your installation.

1. Determine the appropriate location of each Data Enabler Pro in relation to the light luminaires, and of the light luminaires in relation to each other.

   eW Burst Powercore gen2, FTA luminaires can be installed in series or in parallel (wired to a common junction box). The maximum number of luminaires each Data Enabler Pro can support depends on specific configuration details such as luminaire spacing, circuit size, line voltage, and method of connection (in series or in parallel). For more information, and for help calculating the number of luminaires your specific installation can support, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.

   In addition to maximum luminaire 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 length should not exceed 53.3 m (175 ft), and the total cable length per Data Enabler Pro should not exceed 122 m (400 ft).

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

Data integrity — 122 m (400 ft)
maximum total length
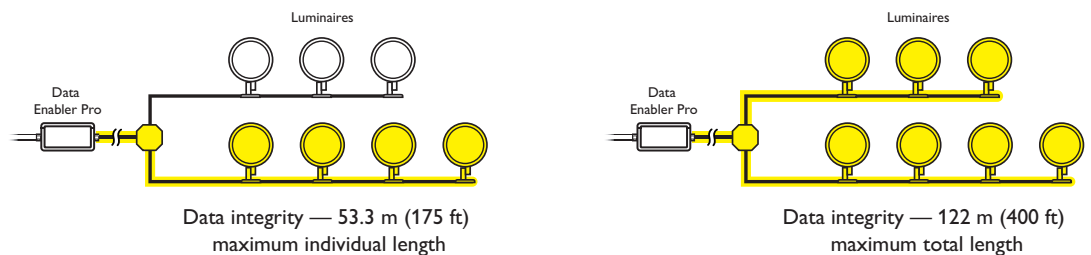
2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, Data Enabler Pro devices, luminaires, and cables.

3. Each eW Burst Powercore gen2, FTA luminaire comes pre-programmed with a unique serial number. As you unpack the luminaires, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

4. Assign each luminaire 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 light luminaire's housing.

Start the Installation

1. Install all Data Enabler Pro devices, including any interfaces with controllers. Data Enabler Pro devices and external controllers send power and control signals to the luminaires over a single luminaire cable. Additional cabling is required to connect luminaires together in parallel or in series.

2. Verify that all additional supporting equipment (switches, controllers) is in place.

3. Ensure that all additional parts and tools are available, including:

   eW Burst Powercore gen2, FTA Architectural Installations

   • The provided stainless steel screws for outdoor installations

   • The provided junction box gasket for outdoor installations

   • Unless surface-mounting, one 102 mm (4 in) round US electrical junction box per luminaire, rated for your application, with 89 mm (3.5 in) center-to-center screw holes for attaching the luminaire's base. (Refer to the manufacturer's literature for additional items required for mounting or sealing.)

   • A 6 mm hex wrench for luminaire tilting and locking

   • A 1/8 in hex wrench for luminaire swiveling and locking

   eW Burst Powercore gen2, FTA Landscape Installations

   • The provided locking nut

   • One electrical junction box or mounting accessory per luminaire, rated for your application. (Refer to the junction box or accessory manufacturer's literature for specific information on mounting or sealing.)

   • A 6 mm hex wrench for luminaire tilting and locking

   • A 33 mm wrench for locking luminaires in place

   All Installations

   • A sufficient length 4-conductor wire. We recommend 12 AWG 4 mm² (0.1 in) stranded copper wire.

   • Conduit as required

   • Electronics-grade room temperature vulcanizing (RTV) silicone sealant as required

   • A 5/32 in hex wrench for installing accessories.

For complete instructions on how to wire the Data Enabler Pro, refer to the Data Enabler Pro Product Guide.

Unpack and Position Luminaires

1. Carefully inspect the box containing eW Burst Powercore gen2, FTA and the contents for any damage that may have occurred in transit.

2. Each eW Burst Powercore gen2, FTA luminaire comes pre-programmed with a unique serial number. As you unpack the luminaires, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

Architectural   **Landscape**
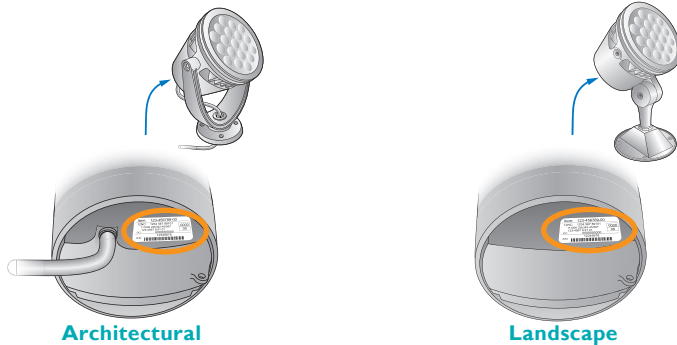
3. Assign each luminaire to a position in the lighting design plan.

4. 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 light luminaire's housing.

Connecting and Mounting eW Burst Powercore gen2, FTA Architectural Luminaires

eW Burst Powercore gen2, FTA Architectural luminaires can be mounted to standard US junction boxes, or they can be mounted to a flat surface or substrate.

Make sure the power is OFF before mounting and connecting eW Burst Powercore gen2, FTA luminaires.

Connecting eW Burst Powercore gen2, FTA Architectural Luminaires to Junction Boxes

1. Mount junction boxes in accordance with the lighting design plan. Each luminaire is designed for mounting in a 102 mm (4 in) round US electrical junction box, rated for your application, with 89 mm (3.5 in) center-to-center screw holes for attaching the luminaire's base.

   Architectural luminaires are supplied with a grounding wire attached to the luminaire's base (canopy). The canopy ground wire can be attached to a grounding point in the junction box, or connected with the ground in the luminaire cable.

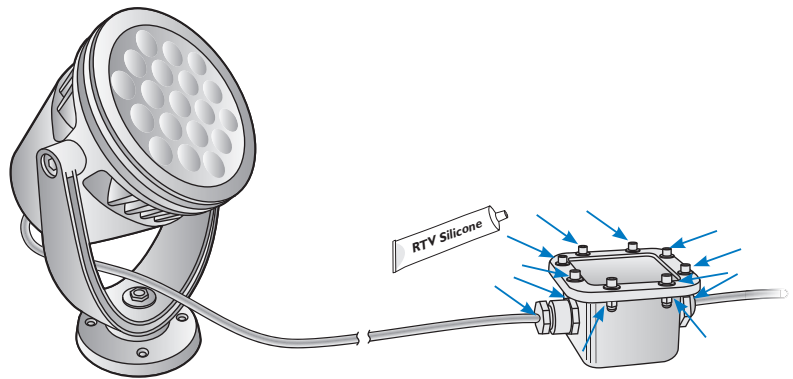   Wiring between junction boxes must comply with local codes.

2. If installing luminaires in a series, pull copper wire between the junction boxes.

   If installing luminaires in parallel, pull copper wire from a Data Enabler Pro to a common junction box, and from the common junction box to each luminaire's junction box.

   We recommend the use of 12 AWG 4 mm² (0.1 in), stranded 4-conductor copper wire. With the recommended wiring, the maximum cable run from a Data Enabler Pro device to any individual eW Burst Powercore gen2 luminaire is 53 m (174 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).

Included in the box

eW Burst Powercore gen2, FTA Architectural

eW Burst Powercore gen2, FTA Architectural luminaire

(4) 10-24 stainless steel screws for outdoor installation

Junction box gasket

Installation Instructions
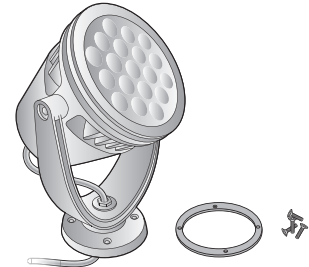
eW Burst Powercore gen2, FTA Landscape

eW Burst Powercore gen2, FTA Landscape luminaire

Locking nut

Installation Instructions

Leader Cable connector dimensions

9.5 mm (0.375 in)   18 AWG 1 mm (0.04 in)

L   N   ⏚   ⏛
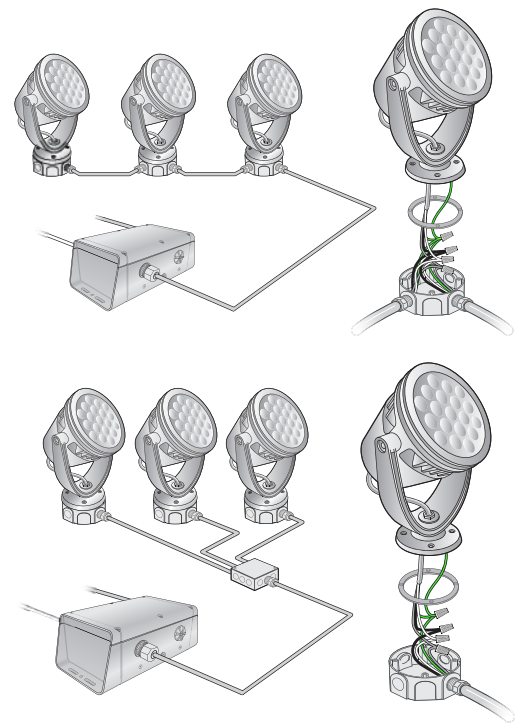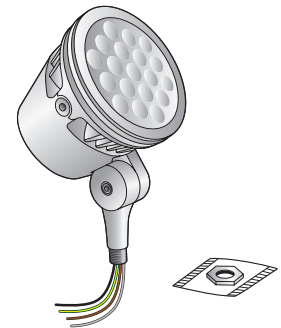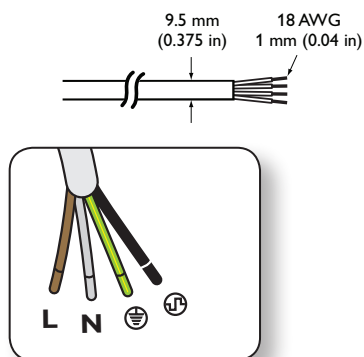
✳ *When there is a solo green or yellow wire attached to the canopy, it is a canopy ground wire that must not be removed. Connect this wire to a suitable grounding point in the junction box or elsewhere nearby.*

Standard ON/OFF Control
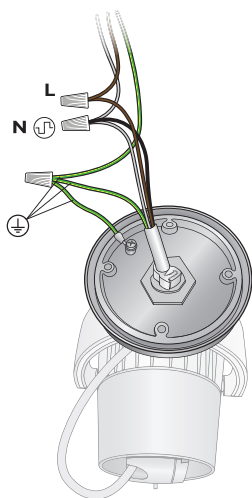
Precision Dimming
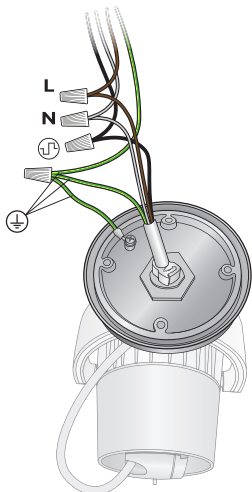
3. Trim the cable from the luminaire to fit in the junction box, leaving enough cable to make wiring connections.

4. Use wire nuts to connect line, neutral, ground, and data. If installing in a damp or wet location, use the included junction box gasket.

   Attach the canopy ground wire to a grounding point in the junction box, or combine it with the luminaire cable ground with a wire nut.

5. Tuck wire connections into the junction box.

6. Screw the luminaire's canopy base into the junction box using the four included
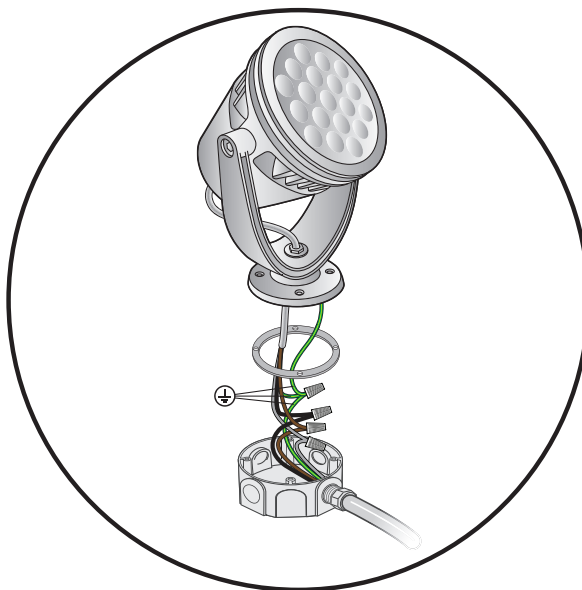
10-24 stainless steel screws. If installing in a damp or wet location, seal all junction boxes with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.
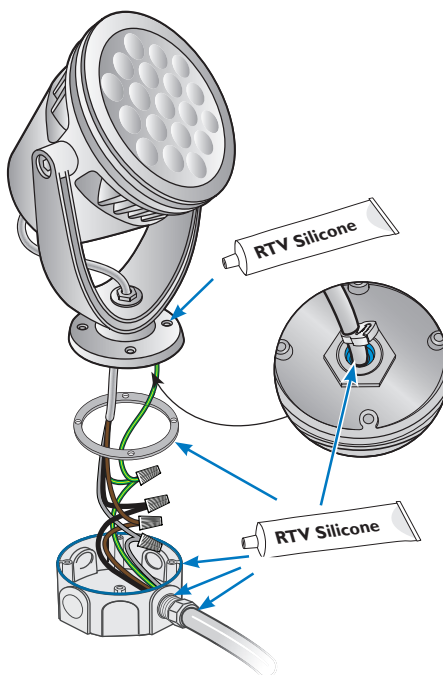
Surface-Mounting eW Burst Powercore gen2, FTA Architectural Luminaires

1. Prepare eW Burst Powercore gen2, FTA Architectural luminaires for surface-mounting:

   • Loosen the cable compression ring on the luminaire yoke.

   • Remove the nylon cable clamp from the luminaire's leader cable where it exits
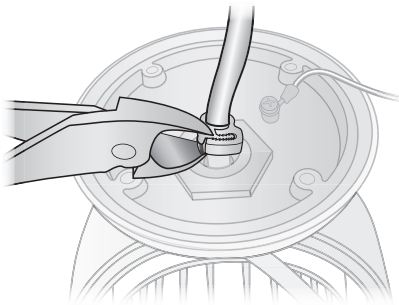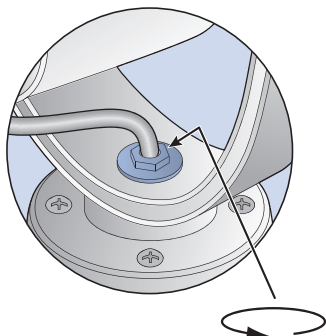
the underside of the canopy base.

   • Disengage the leader cable from the luminaire's canopy base.
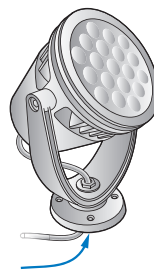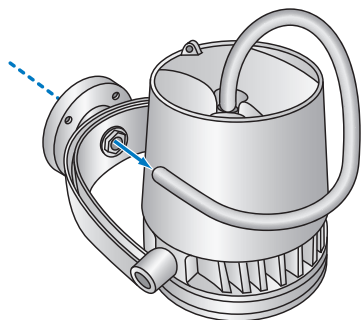
2. Mount junction boxes in accordance with the lighting design plan.

3. Position each eW Burst Powercore gen2, FTA Architectural luminaire in its designated mounting location. Make sure the mounting surface is flat, suitable for the mounting hardware, and clear of debris and other obstructions.

4. Use four suitable mounting screws to secure each eW Burst Powercore gen2, FTA Architectural luminaire to the mounting location.

Leader Cable connector dimensions

9.5 mm (0.375 in)   18 AWG 1 mm (0.04 in)

L N ⏚ ⎍
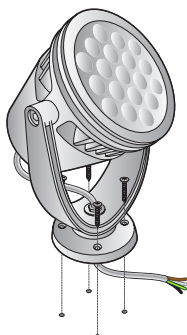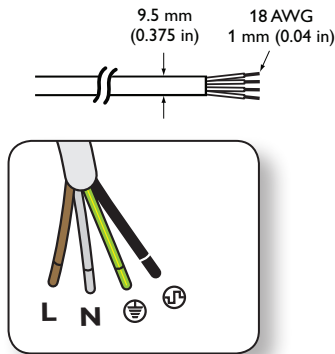
5. If installing luminaires in a series, pull copper wire between the junction boxes.

   If installing luminaires in parallel, pull copper wire from a Data Enabler Pro to a common junction box.

   We recommend the use of 12 AWG 4 mm² (0.1 in), stranded 4-conductor copper wire. With the recommended wiring, the maximum cable run from a Data Enabler Pro device to any individual eW Burst Powercore gen2 luminaire is 53 m (175 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).

6. Use wire nuts to connect line, neutral, ground, and data. If installing in a damp or wet location, use the included junction box gasket.

7. Tuck wire connections into the junction box.

8. Secure all junction box covers. If installing in a damp or wet 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..

RTV Silicone

Connecting and Mounting eW Burst Powercore gen2, FTA Landscape Luminaires

eW Burst Powercore gen2, FTA Landscape luminaires feature a 1/2 in NPT threaded post for installing to standard junction boxes, stanchion mounts, posts, stakes, and other landscape mounting accessories.

Install luminaires in series or in parallel

Make sure the power is OFF before mounting and connecting eW Burst Powercore gen2 luminaires.

1. Mount junction boxes and any landscape mounting accessories in accordance with the lighting design plan.

2. If installing luminaires in a series, pull copper wire between the junction boxes, and from the junction boxes to the luminaires as needed.

   If installing luminaires in parallel, pull copper wire from a Data Enabler Pro to a common junction box, and from the common junction box to the luminaires.

   We recommend the use of 12 AWG 4 mm² (0.1 in), stranded 4-conductor copper wire. With the recommended wiring, the maximum cable run from a Data Enabler Pro device to any individual eW Burst Powercore gen2, FTA luminaire is 53 m (175 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).

3. Thread the locking nut onto the eW Burst Powercore gen2 Landscape threaded post.

4. Use wire nuts to connect line, neutral, ground, and data.

5. Tuck wire connections into the junction box or mounting accessory.

6. Using a 33 mm wrench, torque the locking nut to 33.9 Nm (25 ft-lb). Do not overtighten.

7. If installing in a damp or wet location, seal all junction boxes and mounting accessories with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.
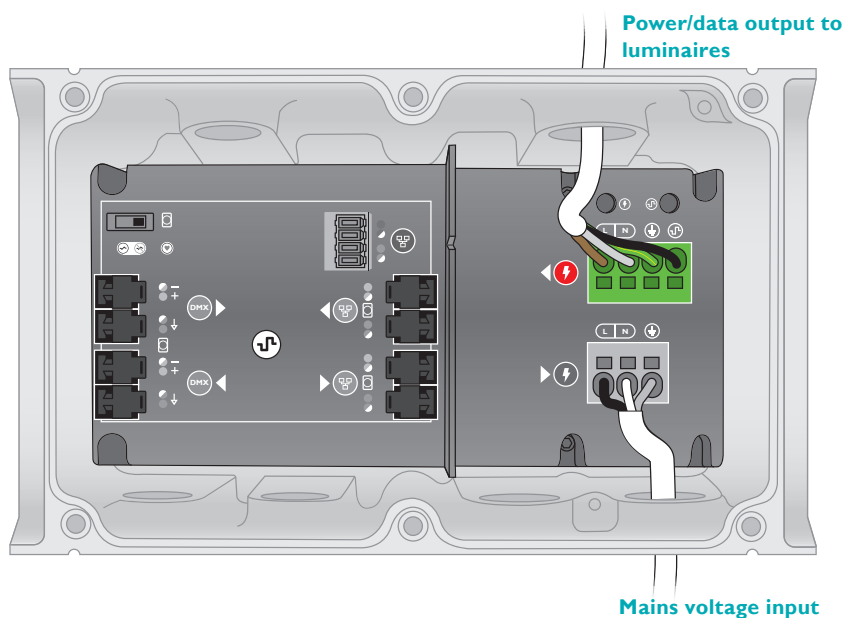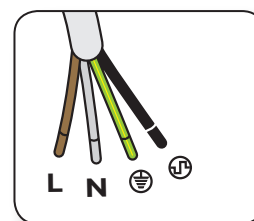
Standard ON/OFF Control   Precision Dimming

33.9 Nm (max)
25 ft-lb (max)

33 mm
(1.19 in)
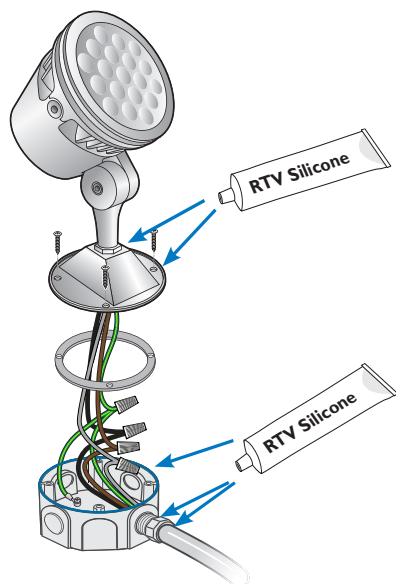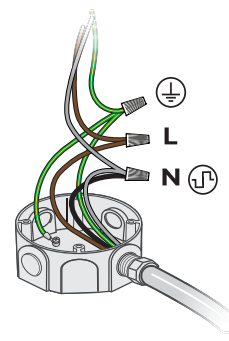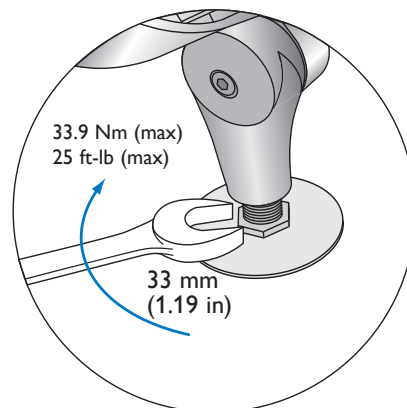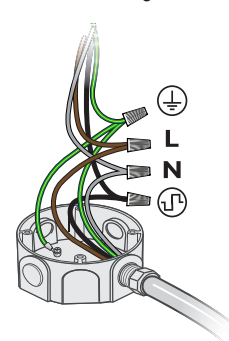
Connect Luminaire Cable to Power

Once you've made all luminaire and junction box connections, connect the lead cable to the 4-wire PC terminal connector block inside the Data Enabler Pro Housing.

Power/data output to luminaires

Mains voltage input

❋ *Refer to the Data Enabler Pro Product Guide for comprehensive installation and configuration instructions. You can view or download the guide from www.colorkinetics. com/ls/pds/dataenablerpro*

L N ⏚ ⎍

Safety cable minimum requirements

| Material	304 or 316 Stainless Steel
Size	4 mm (5/32 in) nominal diameter Minimum break load must be greater than 1,089 kg (2,400 lb)

Attach Safety Cable (Optional)

When installing eW Burst Powercore gen2, FTA luminaires to a wall or overhead, use a safety cable to tether it to a secure anchor point. When dictated by local or state code or advised by a structural engineer, attach a safety cable to the eW Burst Powercore gen2 luminaire housing and tether it to a secure anchor point.

1. Thread a safety cable through the luminaire housing as shown.

2. Attach the safety cable to the mounting surface using a method that follows the code or engineer's requirements.

Architectural

Landscape
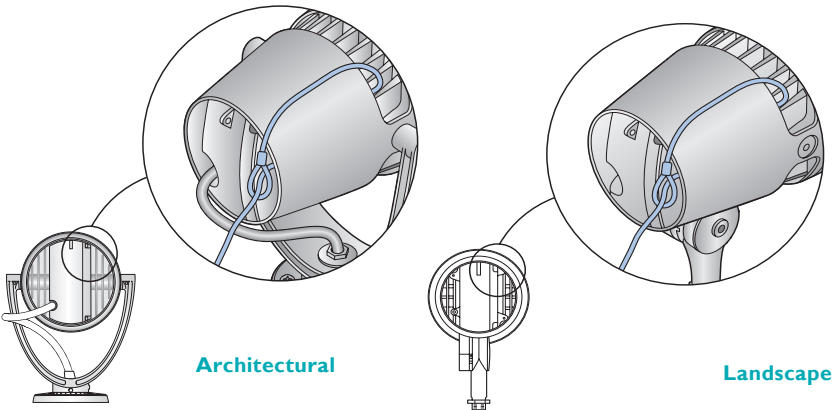
Attach Accessories (Optional)

Accessories can be installed to change the beam angle or add extra protection to the luminaire in outdoor environments.

✳ *For complete instructions on how to install the accessories, refer to the Accessory Installation Instructions.*
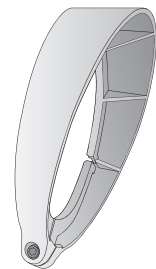
Trim Ring
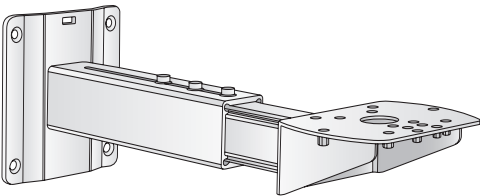
Mounting Arm
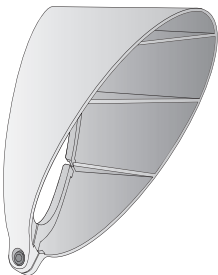
45° Glare Shield

Address and Configure the Luminaires

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

eW Burst Powercore gen2, FTA luminaires operate in 8-bit mode by default. You can configure eW Burst Powercore gen2, FTA to operate in 16-bit mode, which increases luminaire resolution for smoother dimming.

eW Burst Powercore gen2, FTA luminaires come factory-addressed with a starting DMX address of 1. For lighting designs where luminaires work in unison, all luminaires can be assigned the same starting DMX address. Changes to the default starting DMX address are not necessary, but if lights were previously readdressed for use in other installations, you must reset them. For light show designs that show different colors on different luminaires, you must assign unique DMX addresses to your luminaires and sort them in a useful order.

- In Ethernet installations, you can address and configure your luminaires using QuickPlay Pro with a computer connected to your lighting installation's network. QuickPlay Pro can automatically discover all of your luminaires, controllers, and Data Enabler Pro devices for quick configuration.

- In DMX installations, you can address and configure your luminaires using QuickPlay Pro with iPlayer 3 or SmartJack Pro. You can manually enter luminaire serial numbers, or you can import a spreadsheet listing each luminaire's serial number and starting DMX address.

For complete details on addressing and configuring eW Burst Powercore gen2, FTA luminaires with QuickPlay Pro, refer to the *Addressing and Configuration Guide*, which you can view or download at www.colorkinetics.com/support/addressing.

Setting Luminaire Dimming Curves

Dimming curves describe how slowly or quickly a luminaire dims at different levels of input. For finer control, eW Burst Powercore gen2, FTA offers three different dimming curves for use in different situations and applications:

- **Normal**
  The non-linear (gamma) dimming curve used in most Philips Color Kinetics LED lighting luminaires. eW Burst Powercore gen2, FTA luminaires use the normal dimming curve by default.

- **Linear**
  A dimming curve with a linear relationship between power input and DMX output.

- **Tungsten**
  A non-linear dimming curve that emulates the dimming curve of incandescent lamps on a DMX dimmer. This curve offers the most control at low intensities.

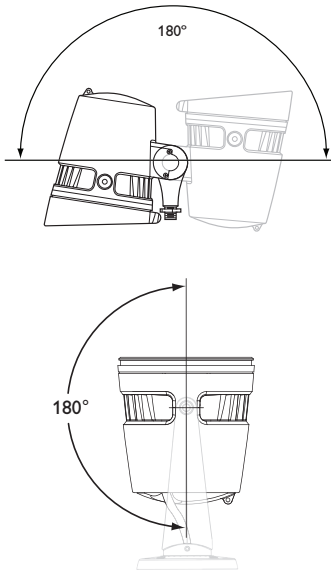## Setting LED Transition Speed

Normally, LEDs react to DMX or other control data instantaneously. In some cases, you may want to slow down the reaction speed to achieve smoother transitions when the intensity of different LED channels changes. eW Burst Powercore gen2, FTA offers five levels of decreasing LED transition speed, from Fast (instant snap changes) to Delay-4 (slowest transition speed).

✻ You can address luminaires and switch between 8-bit mode and 16-bit mode using QuickPlay Pro. You can download QuickPlay Pro from www.colorkinetics.com/support/addressing/

✻ You will need the layout grid that you created when you recorded the serial numbers of the light luminaires in your installation.

Aim and Lock Luminaires

Make sure power is ON before aiming luminaires.

eW Burst Powercore gen2 luminaires can tilt through a full 180°. eW Burst Powercore gen2, FTA Architectural luminaires can also rotate through a full 360° for precise aiming. Locking nuts use standard hex wrenches to secure luminaires firmly in position.

Aiming and Locking eW Burst Powercore gen2, FTA Landscape Luminaires

1. Using a 6 mm hex wrench, loosen the locking nut on the side of the luminaire base.

2. Aim the luminaire by tilting the beam as desired.

3. When the luminaire is aimed as desired, re-tighten the locking nut to secure the luminaire in place. Torque to 33.9 Nm (25 ft-lbs). Do not over-tighten.

Do not look directly into the luminaire when aiming and locking.

180°

180°

6 mm

33.9 Nm (max)
25 ft-lb (max)
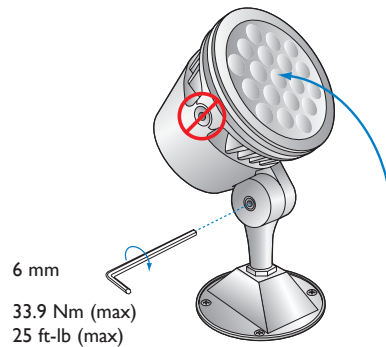
Aiming and Locking eW Burst Powercore gen2, FTA Architectural Luminaires
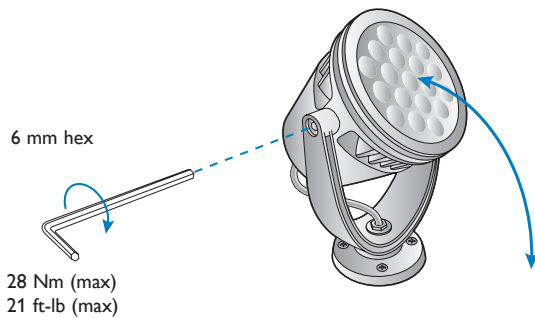
1. To tilt the beam:

    - Loosen the locking nuts on either side of the luminaire yoke using a 6 mm hex wrench.

    - Tilt the beam as desired.

    - Re-tighten the locking nuts to secure the luminaire in place. Torque to 28 Nm (21 ft-lbs). Do not over-tighten.

6 mm hex

28 Nm (max)
21 ft-lb (max)

10°
360°

10°
360
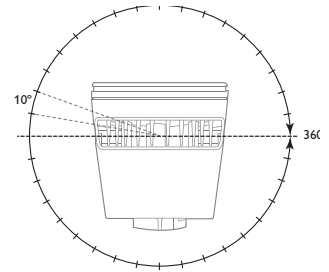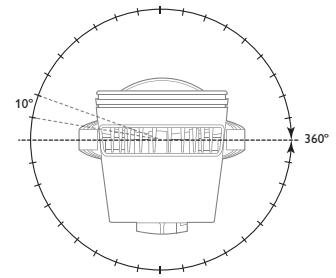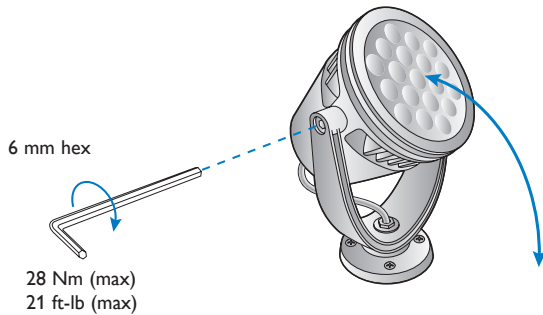
2. To rotate the luminaire:

    - Loosen the locking nuts on either side of the luminaire yoke's base using a 3 mm hex wrench.

    - Rotate the luminaire as desired. Note that the luminaire can be rotated in 10˚ increments.

    - Re-tighten the locking nuts to secure the luminaire in place.

6 mm hex

28 Nm (max)
21 ft-lb (max)

DAS-000177-00 R02 29 Dec 2017

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