



# COLORBURST 4

POWERED BY CHROMACORE®



Color Kinetics® ColorBurst® 4 is a Chromacore®-powered product in the bColor Series, and is designed to meet the needs of lighting designers. ColorBurst 4 provides lighting professionals a small, sleek solution for spotlighting and wall washing with rich, saturated colors and color changing effects. Projecting a soft-edge beam of light, ColorBurst 4 is a sealed product designed for both indoor and outdoor installations. The fixture is fully enclosed in a stylish and rugged die-cast aluminum housing and meets or exceeds specifications for use in wet locations. Enclosed wiring gives ColorBurst 4 a neat appearance and optimum positioning. The housing is equipped with a three-screw accessory ring to affix spread lenses, louvers, and other attachments and is available in either a black, white, or aluminum powder coat finish to match its environment and prevent oxidation.

ColorBurst 4 has three 18AWG wire leads and attaches to a standard junction box or to an optional mounting base, which has a 60-foot (18.3 m) three conductor cable. The 350° locking base swivel, with 350° locking fixture rotation, offers a versatile range of light positioning. ColorBurst 4 can be controlled by a Color Kinetics controller or a third-party controller. Each fixture comes pre-addressed to light number one. With a controller, simple effects, such as, fixed color and color wash, require no additional addressing. Other effects across multiple lights, including Chasing Rainbow or Color Sweep, require further addressing using one of the following Color Kinetics addressing tools: Serialized Addressing Software (SAS) or Zapi.

For protection from extreme temperatures, ColorBurst 4 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and the ColorBurst 4 operation is interrupted causing the light to turn dull red. After 30 minutes the light will auto-cycle and return to full intensity.

### COLORBURST SPECIFICATIONS

**COLOR RANGE** 16.7 million (24bit) additive RGB colors; continuously variable intensity output range  
**SOURCE** High brightness colored light emitting diodes (LEDs)  
**BEAM ANGLE** 33°  
**HOUSING** Die cast aluminum in black, white, or natural aluminum powder coat finish  
**LISTINGS** C-UL US listed, CE certified

### COMMUNICATION SPECIFICATIONS

**DATA INTERFACE** Color Kinetics data interface system  
**CONTROL** Color Kinetics full line of controllers or DMX512 (RS485) compatible when using Color Kinetics power/data supply

### ELECTRICAL SPECIFICATIONS

**POWER REQUIREMENT** 24VDC  
**POWER CONSUMPTION** 10W Max. at full intensity (full RGB)  
**POWER SUPPLY** PDS-150e (ITEM# 109-000008-01); PDS-60 24V (ITEM# 109-000017-XX)

### ENVIRONMENTAL SPECIFICATIONS

**TEMPERATURE RANGE** -4°F to 122°F (-20°C to 50°C) based on testing of specific product  
**PROTECTION RATING** IP66

### LED SOURCE LIFE

In traditional lamp sources, lifetime is defined as the point at which 50% of the lamps fail. This is also termed Mean Time Between Failure [MTBF]. LEDs are semiconductor devices and have a much longer MTBF than conventional sources. However, MTBF is not the only consideration in determining useful life. Color Kinetics uses the concept of useful light output for rating source lifetimes. Like traditional sources, LED output degrades over time (lumen depreciation) and this is the metric for SSL lifetime.

LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by means of control, thermal management, current levels, and a host of other electrical design considerations. Color Kinetics systems are expertly engineered to optimize LED life when used under normal operating conditions. Lumen depreciation information is based on LED manufacturers' source life data as well as other third party testing. Low temperatures and controlled effects have a beneficial effect on lumen depreciation. Overall system lifetime could vary substantially based on usage and the environment in which the system is installed.

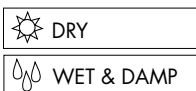
Temperature and effects will affect lifetime. Color Kinetics rates product lifetime using lumen depreciation to 50% of original light output. When the fixture is running at room temperature using a color wash effect, the range of lifetime is in the range of 80,000-100,000 hours. This is LED manufacturers' test data. High output is defined as any LED device that is 1/2 watt or above. For more detailed information on source life, please see [www.colorkinetics.com/lifetime](http://www.colorkinetics.com/lifetime).

### OPTIBIN®

There are inherent variations in the fabrication processes of all semiconductor materials. For LEDs, this variance results in differences in the color and intensity of light output as well as electrical characteristics. Due to these differences, LED manufacturers sort production into "bins," but insuring the availability of a single bin is very difficult. To minimize this issue and achieve optimal color consistency in its products, Color Kinetics has developed and uses a proprietary technology called Optibin. Optibin is an advanced production binning optimization process that minimizes the effects of LED variance for the best possible output uniformity in the final product. Color Kinetics Optibin technology gives you the most consistent control of color and intensity from product to product.

CHROMACORE®  
BY COLOR KINETICS

OPTIBIN®  
BY COLOR KINETICS



- ColorBurst 4 ITEM# 116-000003-00 (White)
- 116-000003-01 (Black)
- 116-000003-02 (Aluminum)
- ColorBurst Base ITEM# 116-000005-00 (White)
- 116-000005-01 (Black)
- 116-000005-02 (Aluminum)

THIS PRODUCT IS PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENT NOS. 6,016,038, 6,150,774 AND OTHER PATENTS LISTED AT [HTTP://WWW.COLORKINETICS.COM/PATENTS/](http://www.colorkinetics.com/patents/). OTHER PATENTS PENDING.

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BRO099 Rev 06

Specifications subject to change without notice. Refer to [www.colorkinetics.com](http://www.colorkinetics.com) for the most recent data sheet versions.

# COLORBURST 4

## PHOTOMETRIC PERFORMANCE

### SOURCE SPECIFICATIONS

Optics: Tempered soft focus glass diffuser  
 Source: 75 LEDs (25 Red, 25 Green, 25 Blue)  
 Beam Angle: 33° (at 50% of peak illuminance)  
 Distribution: Symmetric direct illumination  
 CCT: Adjustable 1,000K-10,000K  
 CRI: Not measurable (CIE 13.3-1995)

### ILLUMINANCE DISTRIBUTION

1.4	2.8	4.4	4.4	2.8	1.4	3.0'/1.0m
15.1	30.1	47.4	47.4	30.1	15.1	
2.0	5.2	9.6	9.6	5.2	2.0	1.5'/0.5m
21.5	56.0	103.3	103.3	56.0	21.5	
2.5	8.5	19.7	19.7	8.5	2.5	0.0'/0.0m
26.9	91.5	212.1	212.1	91.5	26.9	
2.5	9.9	30.4	30.4	9.9	2.5	3.0'/1.0m
26.9	106.6	327.2	327.2	106.6	26.9	
0.7	1.9	21.1	21.1	1.9	0.7	0'/0m
7.5	20.5	227.1	227.1	20.5	7.5	
1.1	2.9	6.6	6.6	2.9	1.1	3.0'/1.0m
11.8	31.2	71.0	71.0	31.2	11.8	

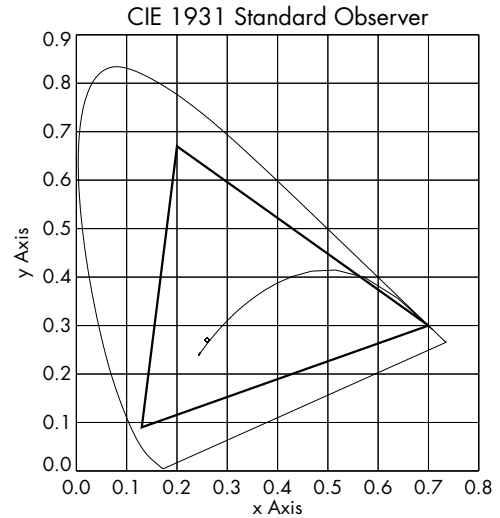
Units: Footcandles/Lux  
 Measured on: White  
 Distance from surface: 3'/1m (from bottom of grid with light at a 45° angle)  
 Multipliers: 0.31 Red, 0.51 Green, 0.26 Blue

### ILLUMINANCE

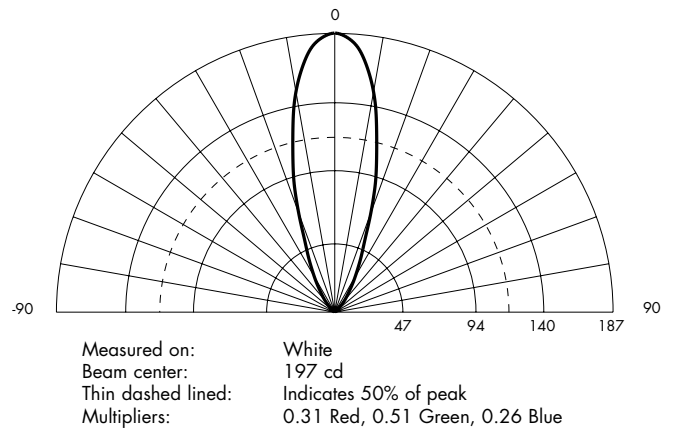
COLOR	3' 1m	6' 2m	9' 3m	15' 5m
WHITE	20.8 223.7	5.2 55.9	2.3 24.9	0.8 8.9
RED	6.4 69.3	1.6 17.3	0.7 7.7	0.3 2.8
GREEN	10.6 114.1	2.6 28.5	1.2 12.7	0.4 4.6
BLUE	5.4 58.1	1.4 14.5	0.6 6.5	0.2 2.3

Measured in Footcandles/Lux on axis.

### GAMUT



### CANDLE POWER DISTRIBUTION

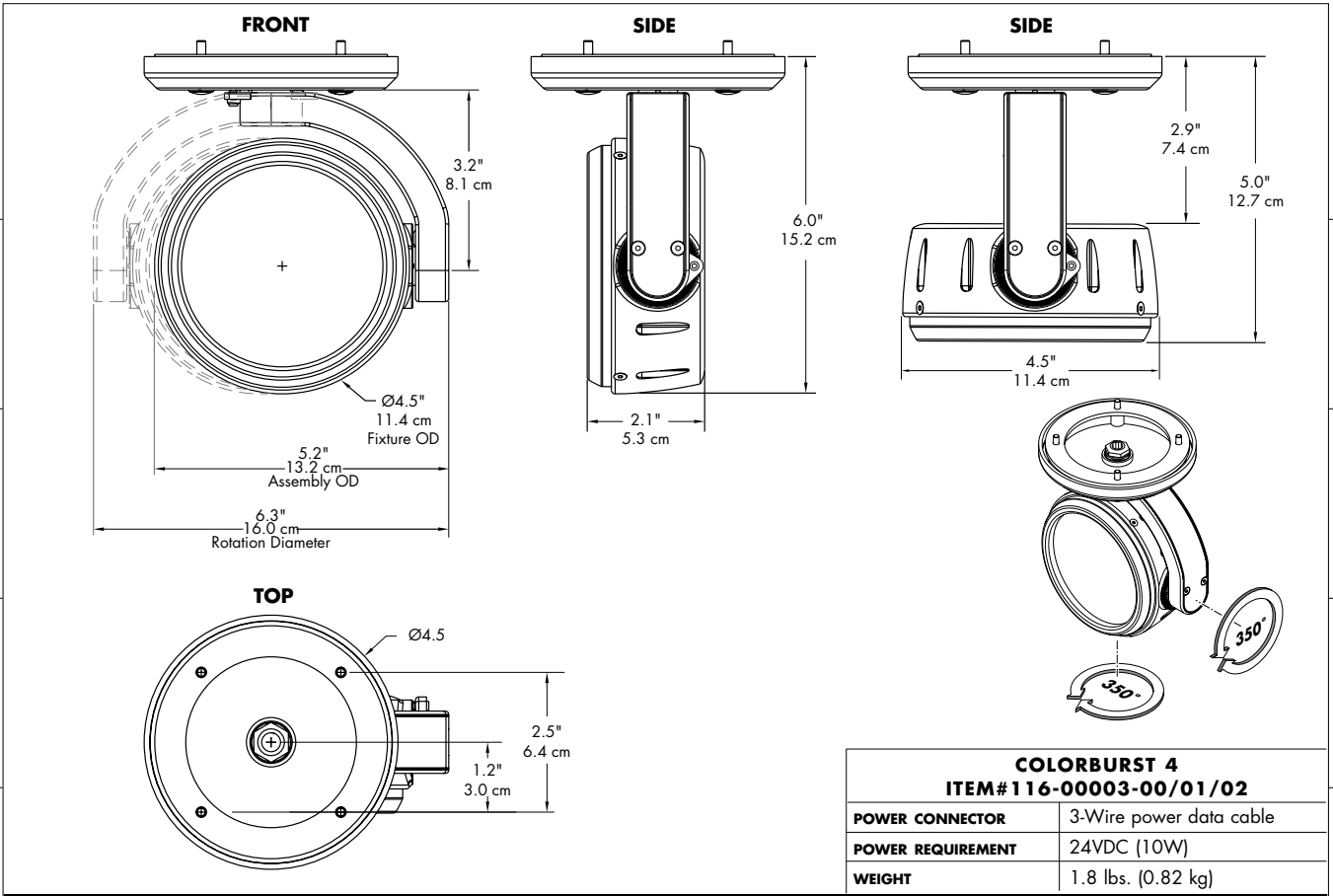


### LIGHT OUTPUT

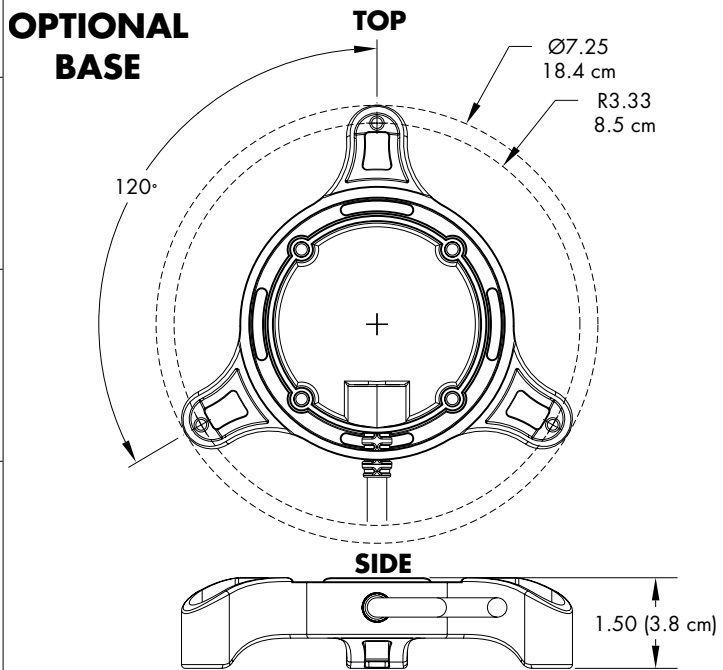
COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	89	10.2	8.72
RED	27.6	3.4	8.1
GREEN	45.4	3.4	13.4
BLUE	23.1	3.4	6.8

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## PHYSICAL DIMENSIONS



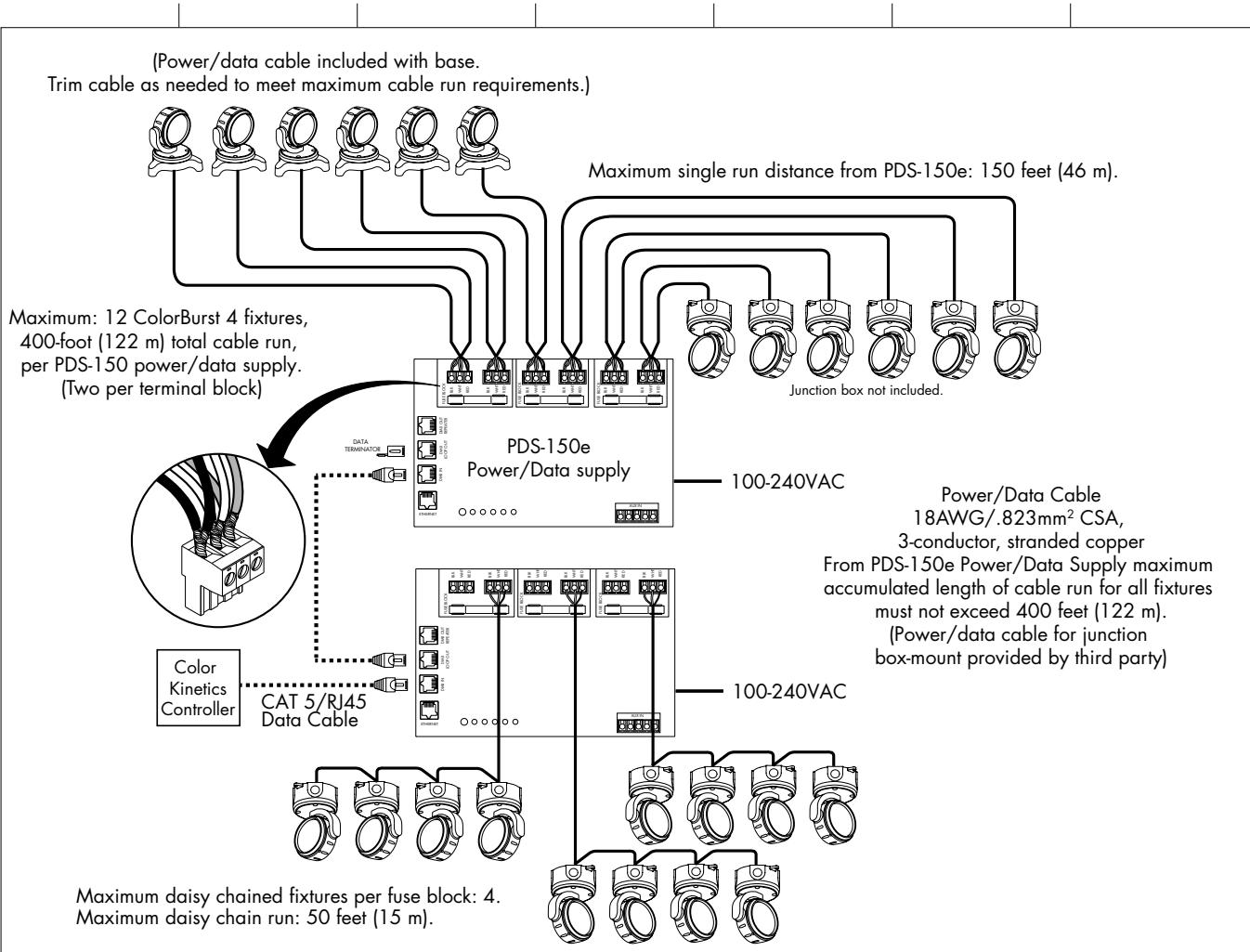
COLORBURST 4 ITEM# 116-00003-00/01/02	
POWER CONNECTOR	3-Wire power data cable
POWER REQUIREMENT	24VDC (10W)
WEIGHT	1.8 lbs. (0.82 kg)



COLORBURST OPTIONAL BASE ITEM# 116-00005-00/01/02	
POWER CONNECTOR	60-foot, 3-Wire power/data cable
POWER REQUIREMENT	24VDC (10W)
WEIGHT	4.13 lbs. (1.87 kg)

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## FUNCTIONAL FLOW DIAGRAM



- NOTES:**
1. For complete installation instructions and safety precautions, refer to the ColorBurst 4 User Guide and wiring diagrams located at [www.colorkinetics.com/support](http://www.colorkinetics.com/support).
  2. When daisy chaining ColorBurst 4, the maximum distance from the PDS-150e to the last fixture in the run is 50 feet (15m).
  3. Total maximum combined cable length per PDS-150e, for all connected fixtures, is 400 feet-home runs or daisy chained.

Additional Items	
<b>Power/Data Supply</b>	PDS-150e (ITEM# 109-000008-01)
<b>Controller</b>	Any Color Kinetics controller or DMX512 compatible controller
<b>Address Unit</b>	Serialized Addressing Software (SAS) or Zapi ITEM# (103-000005-00/01)
<b>Mounting Base (optional)</b>	Base ITEM# 116-000005-00 White ITEM# 116-000005-01 Black ITEM# 116-000005-02 Aluminum