



# COLORBLAST 12

POWERED BY CHROMACORE



Color Kinetics® ColorBlast® 12 is a Chromacore®-powered product, in the bColor series, designed for washing walls with rich, saturated colors and color-changing effects. ColorBlast 12 is specifically designed with the needs of lighting designers, architects, and retail window directors in mind.

ColorBlast 12 is a sealed product designed for both indoor and outdoor installations. The stylish and rugged die-cast aluminum housing meets or exceeds specifications for use in wet and damp locations. ColorBlast 12 is available with a soft-focus, tempered glass lens or a clear tempered glass lens. The soft-focus lens produces a soft-edge 21° beam of light, while the clear lens offers an extended light projection. The housing is also equipped 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. A single 3-wire, 60-foot (18.3 m) cable, which provides both power and data to the light fixture, is rated for outdoor installations.

Designed to quickly aim the fixture without the need of special tools, ColorBlast 12 includes an industrial-grade constant torque hinge. Set screws and an Allen wrench are included for installations requiring locked positioning. The versatile base of ColorBlast 12 can be mounted to a junction box on a wall, ceiling, or floor. ColorBlast 12 includes a separate canopy, liquid-tight cable fitting, and swivel bracket. For a more finished look, mount the canopy to the base and mounting surface. The liquid-tight cable fitting seals the canopy opening. The swivel bracket allows for flexible fixture positioning.

ColorBlast 12 can be controlled by a Color Kinetics controller or a third-party controller. Each fixture comes pre-addressed to light number one. 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, ColorBlast 12 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and ColorBlast 12 operation is interrupted causing the lights to turn dull red. After 30 minutes the lights will auto-cycle and return to full intensity.

## COLORBLAST SPECIFICATIONS

<b>COLOR RANGE</b>	16.7 million (24bit) additive RGB colors; continuously variable intensity output range
<b>SOURCE</b>	High intensity power light emitting diodes (LEDs)
<b>BEAM ANGLE</b>	21° Beam angle
<b>HOUSING</b>	Die Cast Aluminum in black, white, or aluminum powder coat finish
<b>LENSES</b>	Soft-focus tempered glass or clear tempered glass
<b>CONNECTORS</b>	Unified power and data cable
<b>LISTINGS</b>	C-UL US listed, CE certified

## COMMUNICATION SPECIFICATIONS

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

## ELECTRICAL SPECIFICATIONS

<b>POWER REQUIREMENT</b>	24VDC
<b>POWER CONSUMPTION</b>	50W Max. at full intensity (full RGB)
<b>POWER SUPPLY</b>	PDS-150e0(ITEM# 109-000008-01)

## ENVIRONMENTAL SPECIFICATIONS

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

## SOURCE LIFE

Color Kinetics illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. 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 [ambient temperature: -4° F to 104° F (-20° C to 40° C), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume] and when operated using typical color-changing effects. Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.



ITEM# 116-000002-00 (White)  
116-000002-01 (Black)  
116-000002-02 (Aluminum)

U.S. PATENTS 6,016,038, 6,150,774, AND 6,340,868  
EUROPEAN PATENT 1,016,062  
OTHER PATENTS PENDING

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BR0089 Rev 01

Specifications subject to change without notice.

## COLORBLAST 12

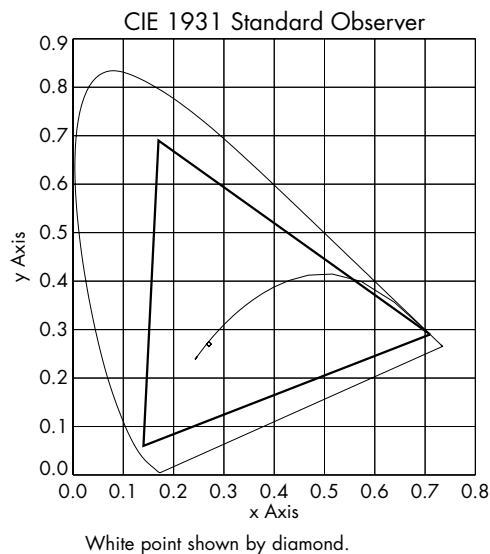
### PHOTOMETRIC PERFORMANCE

Photometric data is based on test results from an independent testing lab.

#### SOURCE SPECIFICATIONS

Optics:	Tempered soft focus glass diffuser Clear tempered glass (Photometrics not yet available)
Source:	36 LEDs (12 Red, 12 Green, 12 Blue)
Beam Angle:	21° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)

#### GAMUT

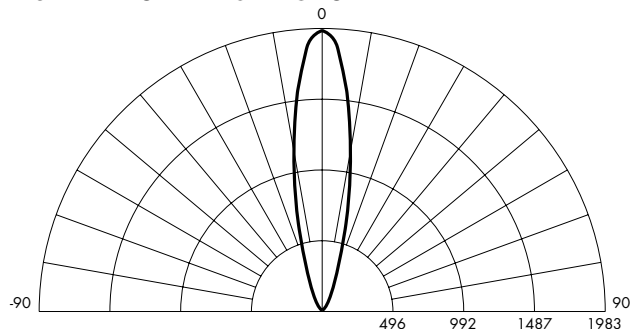


#### ILLUMINANCE DISTRIBUTION

1.8	2.5	3.0	3.0	2.5	1.8	6.0'/2.0m
19.4	26.9	32.3	32.3	26.9	19.4	
2.1	6.0	8.5	8.5	6.2	2.1	
22.6	64.6	91.5	91.5	64.6	22.6	
1.6	7.1	27.0	27.0	7.1	1.6	
17.2	76.4	290.6	290.6	76.4	17.2	3.0'/1.0m
1.8	9.3	64.1	64.1	9.3	1.8	
19.4	100.1	690.0	690.0	100.1	19.4	
1.5	6.2	40.0	40.0	6.2	1.5	
16.1	66.7	430.6	430.6	66.7	16.1	
1.0	2.8	7.9	7.9	2.8	1.0	0.0'/0.0m
10.8	30.1	85.0	85.0	30.1	10.8	
3.0'/1.0m		0.0'/0m		3.0'/1.0m		

Units: Footcandles/Lux  
 Measured on: White  
 Distance from surface: 3'/1m (from bottom of grid with light at a 45° angle)  
 Multipliers: 0.28 Red, 0.54 Green, 0.26 Blue

#### CANDLE POWER DISTRIBUTION



#### ILLUMINANCE

COLOR	3'	6'	9'	12'	15'
	1m	2m	3m	4m	5m
WHITE	220.6 2374.5	55.2 594.2	24.5 263.7	13.8 148.5	8.8 94.7
RED	62.0 667.4	15.5 166.8	6.9 74.3	3.9 42.0	2.5 26.9
GREEN	118.4 1274.4	29.6 318.6	13.2 142.1	7.4 79.7	4.7 50.6
BLUE	56.7 610.3	14.2 152.8	6.3 67.8	3.6 38.8	2.3 24.8

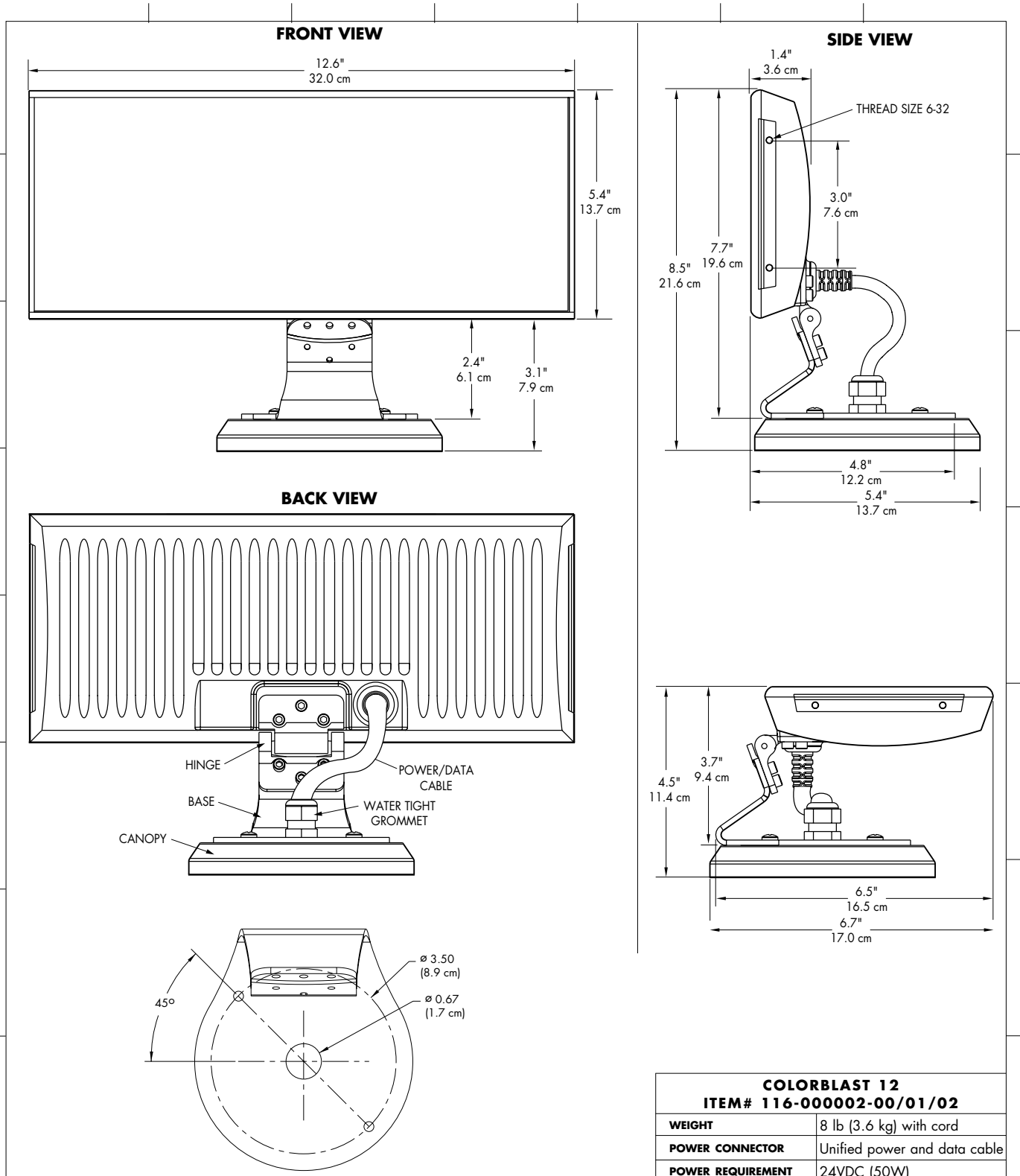
Measured in Footcandles/Lux on axis.

#### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	452	50.0	9.0
RED	124	17.2	7.2
GREEN	260	17.5	14.8
BLUE	117	17.9	6.5

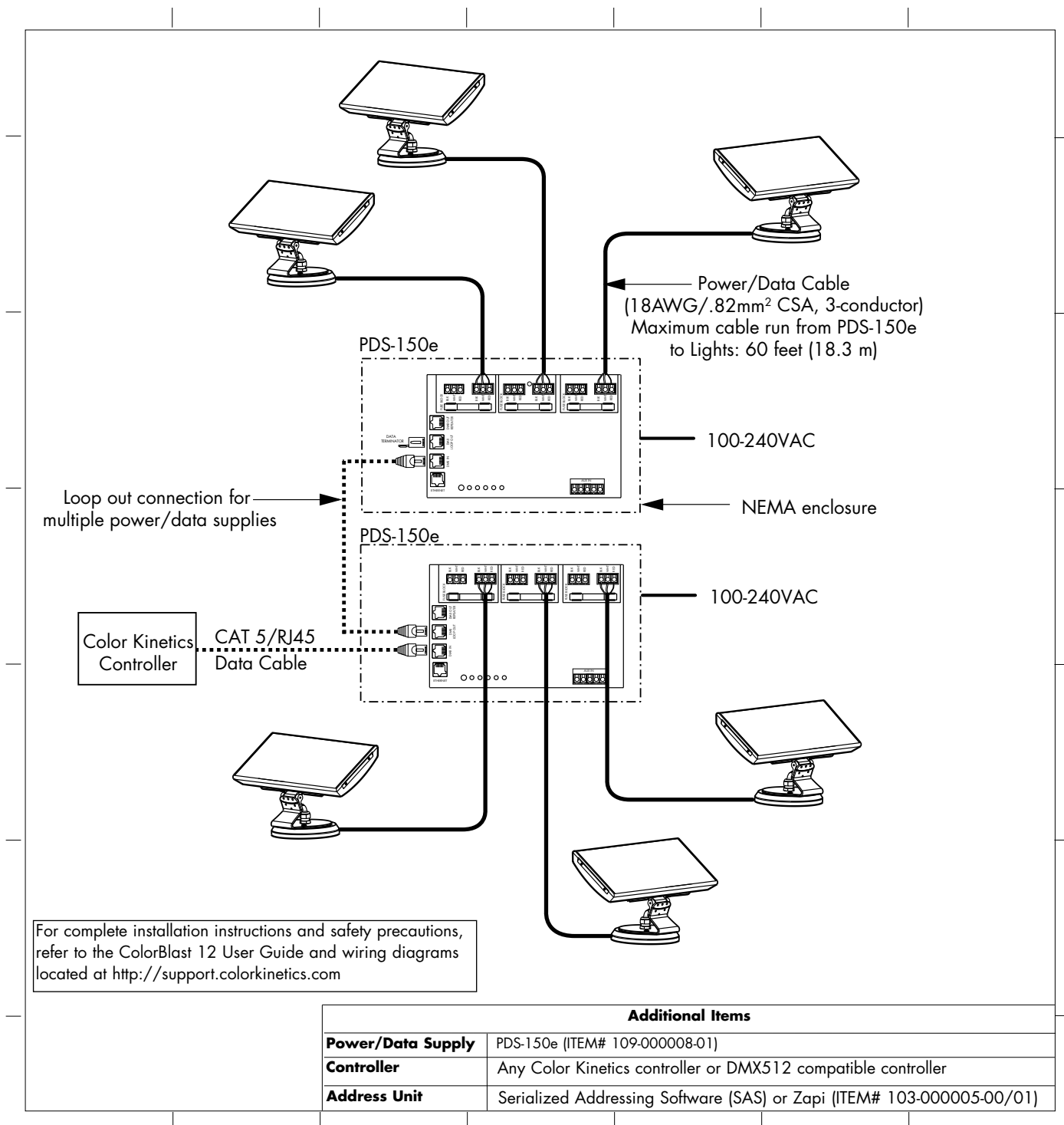
# COLORBLAST 12

## PHYSICAL DIMENSIONS



## COLORBLAST 12

### FUNCTIONAL FLOW DIAGRAM



#### U.S. AND FOREIGN PATENTS AND PATENTS PENDING

Color Kinetics Incorporated grants the purchaser of its lighting products and controllers a personal and non-transferable license to use Chromacore®, its patented technology for networkable control of LED-based color-changing lighting fixtures for illumination, display and design. This license is granted only by Color Kinetics Incorporated, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using networkable control of LED-based color-changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

#### MANUFACTURING DATA

To ensure the highest level of product reliability, this Color Kinetics design endured accelerated life test conditions including an operating temperature span of 360°F and cyclic loading up to 60G.