

# eW Cove MX Powercore

Date: \_\_\_\_\_

Type: \_\_\_\_\_

Firm Name: \_\_\_\_\_

Project: \_\_\_\_\_

**3500 K, 50° x 70° Beam Angle, 12.5 W/ft, 305 mm (1 ft)**

## Premium interior linear cove and accent luminaire with single temperature white light

eW Cove MX Powercore delivers the highest light output in the line of solid white linear cove lights from Color Kinetics. eW Cove MX Powercore can be used for accent lighting and indirect general illumination, as well as the full range of wall and ceiling cove applications. eW Cove MX Powercore meets or exceeds the performance of comparable linear fluorescent strip cove lights while lowering installation, energy, and maintenance costs. eW Cove MX Powercore offers environmentally conscious buyers a green, energy-efficient lighting solution without sacrificing quality or quantity of light.



- Lower cost than comparable fluorescent strip lighting—With efficacy of up to 58.5 lm/W, competitive pricing, long useful life, and low-maintenance operation, eW Cove MX Powercore represents a cost-effective alternative to traditional cove lights, offering lower first and total cost than dimmable T5 and 2-lamp T8 strip lights in typical cove applications.
  - Two lengths and multiple color temperature options for design and application flexibility—305 mm (1 ft) and 1.2 m (4 ft) luminaires are available in 3000 K, 3500 K, and 4000 K for applications calling for warm, neutral, or cool white light.
  - Multiple levels of power consumption—12.5 W/ft luminaires offer high-intensity light output of up to 696 lumens per foot. 8 W/ft luminaires are factory-set to a lower maximum power consumption level to support ASHRAE standards, LEED green building certification, and other power-limited projects.
  - Integrates patented Powercore technology—Powercore rapidly, efficiently, and accurately controls power output to luminaires directly from line voltage, eliminating the need for external power supplies and lowering total system cost.
  - Support for multiple voltages—Accepts power input of 100 to 277 VAC, allowing consistent installation in any location around the world.
  - Smooth dimming capability—Patented DIMand technology offers smooth dimming capability with the DM-1000 0-10 V ELV Dimmer or selected reverse-phase ELV-type dimmers.
  - Industry-best white-light quality and color consistency—Advances in Optibin, Color Kinetics' proprietary binning optimization process, now provides color-consistency within a 2-step MacAdam ellipse across eW Cove product luminaires and manufacturing runs.
  - Simple installation—Powercore delivers line voltage directly to the luminaires, simplifying installation and allowing long product runs. Easy-to-install 1.2 m (4 ft) mounting tracks allow quick project setup in linear applications.
  - Easy mounting and positioning—With end-to-end locking power connectors that can make turns of up to 180°, luminaires are easy to reposition in even the most challenging mounting circumstances. Luminaires rotate in 10° increments through a full 180° for precise aiming and color mixing. Optional mounting tracks support vertical and overhead positioning. 305 mm (1 ft) and 1.5 m (5 ft) jumper cables can add extra space between luminaires.
- For detailed product information, please refer to the Cove Product Guide at [www.colorkinetics.com/global/products/essentialwhite/ewcovemxpc/](http://www.colorkinetics.com/global/products/essentialwhite/ewcovemxpc/)

# Specifications

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

## Output

Color Temperature *	3500 K
Beam Angle	50° x 70°
Lumens †	476
Efficacy (lm/W)	40
CRI	84

## Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	12.5 W
Power Factor	> 0.99 @ 120 VAC
Surge Limits ¶	0.5 kV maximum differential (L to N) 1 kV maximum common (L to Gnd or N to Gnd)

For additional Surge Protection Requirements for LED Lighting Systems, please refer to [www.colorkinetics.com/KB/surge-protection](http://www.colorkinetics.com/KB/surge-protection).

## Control

Control Channels	1 channel per 1 ft section
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For additional Control Channel information, please refer to <https://colorkinetics.helpdocs.io/article/fv5rkvclq>.

## Dimmer ‡

Compatible with selected commercially available reverse-phase ELV-type dimmers

## Lumen Maintenance

Threshold§	Ambient Temperature		Calculated ¶¶
	Reported ¶¶		
L <sub>70</sub>	25 °C	65,000	> 100,000
	50 °C	65,000	> 100,000
L <sub>50</sub>	25 °C	65,000	> 100,000
	50 °C	65,000	> 100,000

\* 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.colorkinetics.com/support/appnotes/](http://www.colorkinetics.com/support/appnotes/) for more information.

§ L<sub>xx</sub> = 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.

¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

¶¶ 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.

## Physical

Dimensions (Height x Width x Depth)	51 x 305 x 38 mm (2 x 12 x 1.5 in)
Weight	454 g (1 lb)
Housing Material	Die-cast aluminium, white powder-coated finish
Lens	Polycarbonate
Luminaire Connections	Integral male/female connectors

## Temperature Ranges

-20 to 50 °C (-4 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
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## Thermal Protection enabled

For additional Thermal Protection information, please refer to <https://colorkinetics.helpdocs.io/article/sh301ducix>

## Luminaire Run Lengths

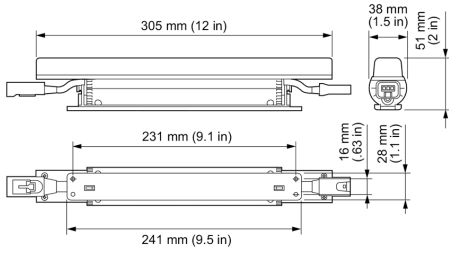
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

Approbation	UL/cUL, FCC Class B, PSE, C-Tick, SAA
Environment	Dry/Damp Location, IP20



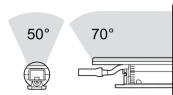
# Dimensions



# Photometrics 12.5 w/ft, 305 mm (1 ft), 50° x 70° beam angle

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.colorkinetics.com/global/support/ies](http://www.colorkinetics.com/global/support/ies).

Beam Angle	50° x 70°
LED	3500 K
Lumens	476.0
Efficacy (lm/W)	40



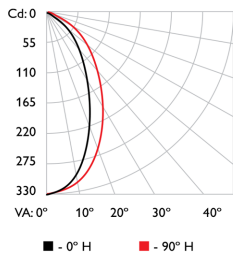
## Illuminance at Distance

Distance	Center Beam fc	Beam Width
0.7 ft	736 fc	0.7 ft 1.0 ft
1.3 ft	184 fc	1.4 ft 1.9 ft
2.0 ft	82 fc	2.1 ft 2.9 ft
2.7 ft	46 fc	2.8 ft 3.9 ft
3.3 ft	29 fc	3.4 ft 4.8 ft
4.0 ft	20 fc	4.1 ft 5.8 ft

## Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	203	42.7
0- 40	291	61.2
0- 60	408	85.7
0- 90	463	97.3
90-120	8	1.8
90-130	10	2.1
90-150	12	2.6
90-180	13	2.7
0-180	476	100.0

## Polar Candela Distribution



Cd:0	0	5	15	25	35	45	55	65	75	85	90
0	0.0	327	327	327	327	327	327	327	327	327	327
5	320	322	323	323	323	323	323	323	324	324	324
15	262	266	278	288	292	292	292	292	292	292	292
25	181	188	208	228	237	237	237	237	237	237	237
35	114	121	139	161	169	169	169	169	169	169	169
45	70	74	87	103	109	109	109	109	109	109	109
55	42	45	53	61	65	65	65	65	65	65	65
65	25	27	31	35	36	36	36	36	36	36	36
75	15	15	16	17	17	17	17	17	17	17	17
85	8	8	7	5	3	3	3	3	3	3	3
90	6	6	5	2	1	1	1	1	1	1	1

5.5 m (18.1 ft) Vert. Spread: 54.6°  
 1 fc maximum distance

For lux multiply fc by 10.7

## Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RC	Effective Floor Cavity Reflectance: 20%														
	80				70				50						
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0
0	118118118118	115115115115	110110110110	104104104104	100100100100	97									
1	110106102	99	93	88	83	79	75	71	68	66	64	61	59	57	55
2	102	95	89	84	79	74	70	66	63	61	59	57	55	53	51
3	94	88	83	79	74	70	66	63	61	59	57	55	53	51	49
4	88	83	79	74	70	66	63	61	59	57	55	53	51	49	47
5	82	77	73	69	65	62	59	57	55	53	51	49	47	45	43
6	76	71	67	63	60	57	55	53	51	49	47	45	43	41	39
7	72	67	63	60	57	55	53	51	49	47	45	43	41	39	37
8	67	63	59	56	53	51	49	47	45	43	41	39	37	35	33
9	63	59	55	52	49	47	45	43	41	39	37	35	33	31	29
10	60	56	52	49	46	44	42	40	38	36	34	32	30	28	26

# Luminaire and Accessories

Use Item Number when ordering in North America

<b>Luminaire</b>	<b>Item Number</b>	<b>Item 12NC</b>
eW Cove MX Powercore, 3500 K, 50° x 70° Beam Angle, 12.5 W/ft, 305 mm (1 ft)	523-000050-09	910503700987
<b>Accessories</b>		
Mounting Track, White, 1 @ 1219 mm (4 ft)	120-000124-00	910503701787
Leader Cable with Terminator and strain relief, 3.1 m (10 ft), UL/cUL	108-000047-00	910503700972
Leader Cable with Terminator and strain relief, 3.1 m (10 ft), CE/CCC	108-000047-01	910503700973
Jumper Cable, 305 mm (1 ft), UL/cUL	108-000048-00	910503700974
Jumper Cable, 305 mm (1 ft), CE/CCC	108-000048-02	910503700976
Wiring Compartment with Terminator, UL/cUL	120-000077-01	910503700994
Terminators, Quantity 10	120-000099-00	910503701120
DM-1000 0-10 V ELV Dimmer	109-000036-00	912400135916



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Color Kinetics  
[www.colorkinetics.com/global/products/essentialwhite/ewcovemxp/](http://www.colorkinetics.com/global/products/essentialwhite/ewcovemxp/)

02/17/2025