Graze Compact Powercore

Date:
Type:
Firm Name:
Project:

RGBW, 100 to 277 VAC, Low Power, 10° x 60°, 914 mm (3 ft)

Exterior compact linear grazing luminaire with intelligent RGBW light

Graze Compact Powercore, RGBW is a high-performance, exterior linear luminaire designed to highlight architectural features like molding details, archways and windows up to two stories high. Graze Compact RGBW luminaires adds a separate white LED creating better-quality whites compared to RGB. Multiple luminaire lengths and beam angles support a large range of façade or surface illumination applications. The brand new low-profile housing, connectorized cabling, a universal power input range, and direct line voltage make Graze Compact luminaires easy to install and operate.

- Tailor light output to specific applications—Available in four standard lengths (1 ft, 2 ft, 3 ft, and 4 ft), and four standard 10° x 60°, 30° x 60°, 60° x 60°, and 100° x 100° beam angles.
- Ultra compact form factor—Graze Compact's ultra-low profile is half the size of Graze, allowing it to fit discretely into almost any layout, from simple to elaborate.
- Innovative optical design features fully mixed light directly out of the luminaire. This allows for smaller setbacks than many other luminaires.
- Improve color consistency between all LED luminaires in a family with Chromasync technology. During the manufacturing process a calibrated light measurement device creates an algorithm to define a common color gamut for an entire family of LED luminaires. When Chromasync is enabled, color consistency between luminaires is achieved without having to manually adjust color points on each luminaire.
- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage – rapidly, efficiently, and accurately. The 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.
- Graze Compact provides years of reliable use under rugged conditions. Graze Compact raises reliability even further with more protection from corrosion by meeting ASTM B117 standard and ANSI C136.31-2010 standard with a 3G vibration rating.
- Works seamlessly with the Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro—as well as third-party controllers.
- Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Jumper Cables. Constant torque locking hinges offer simple and consistent position control from various angles.
- Customizable accessories - Customize your Graze luminaire with a choice of accessories: mounting arm, masking shield, symmetric louver, and masking tray. Mounting arm available in three sizes.

For detailed product information, please refer to the Graze Compact Product Guide at www.colorkinetics.com/global/products/rgb/graze-compact-powercore-rgbw/

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Specifications

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

Output

Beam Angle	10° x 60°
Lumens †	585
Lumens per channel	R 309 / G 564 / B 202 / W 595
Efficacy (lm/W) §§	48.2
LED Channels	Red/Green/Blue/White

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	12.1 W
Surge Limits ¶	2 kV maximum differential (L to N) 4 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.

Control

Interface	Data Enabler Pro (DMX or Ethernet)

Control System

Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management Works with Interact Landmark

Lumen Maintenance

Threshold§	Ambient Temperature	Reported ¶¶	Calculated ¶¶
L_{90}	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 100,000
L_{80}	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 100,000
L_{70}	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 100,000
L_{50}	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 100,000

Physical

Dimensions (Height x Width x Depth)	45.05 x 915.9 x 42.2 mm (1.77 x 36.06 x 1.66 in)
Weight	1.03 kg (2.27 lb)
Housing Material	Extruded anodized aluminium
Lens	Glass
Luminaire Connections	Integral male/female waterproof connectors
Mounting	Multi-positional, constant torque locking hinges

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

Vibration Resistance

Complies with ANSI C136.31, 3G

Mechanical Impact	IK07

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity	0 to 95%, non-condensing

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/

Certification and Safety

Approbation	UL/cUL, FCC Class A, PSE, CE, CQC, RCM, EAC, BIS, UA
Environment	Dry/Damp/Wet Location, IP66

For additional Energy Efficiency Class Information, please refer to https://colorkinetics.helpdocs.io/article/cviis2p8qq.

† 305 mm (1 ft) lumen output measurements comply with IES LM-79-08 testing procedures. 610 mm (2 ft), 914 mm (3 ft), and 1219 mm (4 ft) measurements are estimated based on the 305 mm (1 ft) measurements.

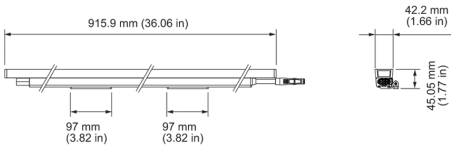
§ Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

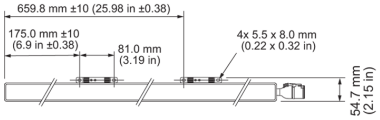
¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

§§ Efficacy measurements are estimated based on the 305 mm (1 ft) measurements.

¶¶ 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.

Dimensions

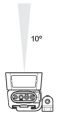




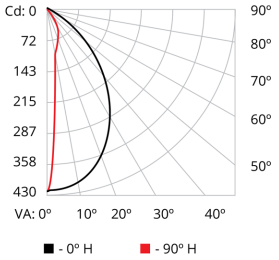
Low Power, 10° x 60° beam angle, 305 mm (1 ft), max on

Photometric data is based on full hemisphere testing to IES standards.

LED	RGBW
Lumens	195.0
Efficacy (lm/W)	48.2

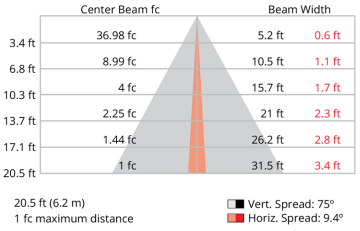


Polar Candela Distribution



	0	25	45	70	90
0	420	420	420	420	420
5	414	342	256	199	188
15	384	138	97	88	87
25	323	84	74	66	64
35	245	61	50	36	31
45	158	41	27	13	10
55	83	23	12	6	5
65	34	10	5	3	2
75	9	3	2	1	1
85	1	0	0	0	0
90	0	0	0	0	0

Illuminance at Distance



20.5 ft (6.2 m)
1 fc maximum distance

Vert. Spread: 75°
Horiz. Spread: 9.4°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	107.7	55.10%
0-40	145.1	74.30%
0-60	185.3	94.80%
60-90	10.1	5.10%
70-100	2.8	1.40%
90-120	0	0%
0-90	195.3	100%
90-180	0	0%
0-180	195.3	100%

For lux multiply fc by 10.87

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50			30			10		0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR:																		
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.12	1.09	1.06	1.04	1.1	1.07	1.04	0.92	1.03	1.01	0.99	0.99	0.97	0.96	0.96	0.94	0.93	0.91
2	1.05	1	0.95	0.91	1.03	0.98	0.94	0.83	0.95	0.91	0.88	0.92	0.89	0.86	0.89	0.86	0.84	0.82
3	0.99	0.91	0.86	0.81	0.97	0.9	0.85	0.76	0.87	0.83	0.79	0.85	0.81	0.78	0.82	0.79	0.76	0.75
4	0.93	0.84	0.78	0.73	0.91	0.83	0.77	0.69	0.81	0.76	0.71	0.79	0.74	0.71	0.77	0.73	0.7	0.68
5	0.88	0.78	0.71	0.66	0.86	0.77	0.71	0.64	0.75	0.69	0.65	0.73	0.68	0.65	0.72	0.67	0.64	0.62
6	0.83	0.72	0.66	0.61	0.81	0.72	0.65	0.59	0.7	0.64	0.6	0.68	0.63	0.6	0.67	0.63	0.59	0.57
7	0.78	0.68	0.61	0.56	0.77	0.67	0.6	0.55	0.65	0.6	0.55	0.64	0.59	0.55	0.63	0.58	0.55	0.53
8	0.74	0.63	0.57	0.52	0.73	0.63	0.56	0.51	0.61	0.56	0.52	0.6	0.55	0.51	0.59	0.55	0.51	0.5
9	0.7	0.59	0.53	0.48	0.69	0.59	0.53	0.48	0.58	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.46
10	0.67	0.56	0.5	0.45	0.66	0.56	0.49	0.45	0.55	0.49	0.45	0.54	0.49	0.45	0.53	0.48	0.45	0.44

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Graze Compact Powercore, RGBW, 100 to 277 VAC, Low Power, 10° x 60°, 914 mm (3 ft)	423-000021-08	912400136707
Accessories		
Graze Compact Powercore Jumper Cable, 1 ft, CE/CQC	108-000073-01	912400136931
Graze Compact Powercore Jumper Cable, 5 ft, CE/CQC	108-000073-03	912400136933
Graze Compact Powercore Jumper Cable, 10 ft, CE/CQC	108-000073-05	912400136935
Graze Compact Powercore Jumper Cable, 20 ft, CE/CQC	108-000073-07	912400136937
Graze Compact Powercore Jumper Cable, 30 ft, CE/CQC	108-000073-09	912400136939
Graze Compact Powercore Jumper Cable, 1 ft, UL	108-000073-00	912400136930
Graze Compact Powercore Jumper Cable, 5 ft, UL	108-000073-02	912400136932
Graze Compact Powercore Jumper Cable, 10 ft, UL	108-000073-04	912400136934
Graze Compact Powercore Jumper Cable, 20 ft, UL	108-000073-06	912400136936
Graze Compact Powercore Jumper Cable, 30 ft, UL	108-000073-08	912400136938
Graze Compact Powercore Leader Cable, 10 ft, CE/CQC	108-000074-01	912400136941
Graze Compact Powercore Leader Cable, 50 ft, CE/CQC	108-000074-03	912400136943
Graze Compact Powercore Leader Cable, 10 ft, UL	108-000074-00	912400136940
Graze Compact Powercore Leader Cable, 50 ft, UL	108-000074-02	912400136942
Graze Compact Constant Torque Hinge, (Set of 10)	120-000211-00	912400136664
Graze Compact Masking Tray, 914 mm, 3 ft	120-000209-02	912400136658
Graze Compact Masking Tray End Plate, (Pair)	120-000209-04	912400137116
Architectural Mounting Arm, Short, Gray	120-000206-00	912400136642
Architectural Mounting Arm, Medium, Gray	120-000206-01	912400136643
Architectural Mounting Arm, Long, Gray	120-000206-02	912400136644
Graze Compact Symmetric Louver, 914 mm, 3 ft	120-000207-02	912400136650
Graze Compact Tether Anchor, (Set of 10)	120-000211-01	912400136665
Graze Compact Glare Shield, 914 mm, 3 ft	120-000216-03	912400137228
Power Supplies		
Data Enabler Pro, 3/4 in / 1/2 in NPT (U.S. trade size conduit)	106-000004-00	910503701210
Data Enabler Pro, PG21/PG13 (metric size conduit)	106-000004-01	910503701211

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