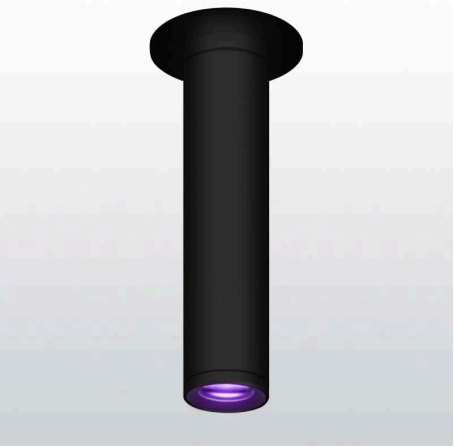
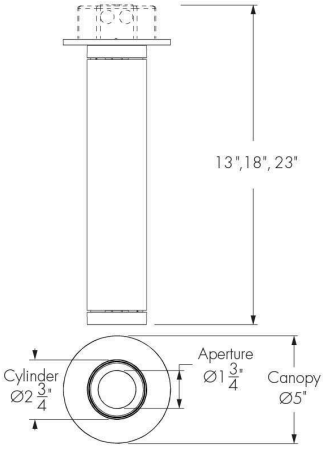
Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____





Front view

Bottom view

Photometric Summary

Based on Narrow Optic (Nominal 25°), MRGBWP in Optidrive™ (White 3000K CRI 96+)

Nominal output [lm]	Delivered output [lm]	Power (120V) [W]	Efficacy [lm/W]	Power (277V) [W]	Efficacy [lm/W]
700	596	14	43	14	43

1. Consult website for latest IES files.

2. Photometric performance is measured in compliance with IESNA LM-79-24.

Optics


Narrow Spot 15°


Narrow 25°


Medium 40°


Medium Faceted Reflector 40°


Wide 60°


Wide Faceted Reflector 60°


Very Wide 80°


Very Wide Faceted Reflector 80°


True Asymmetric Wallwash


Double Asymmetric

Description

The Lumencore Cylinder Opticolor+ Nano Surface Mount is a high-performance LED luminaire designed for commercial, residential, or hospitality environments. This versatile three-in-one fixture combines Dynamic RGBW Colors, Dynamic White with Dim-to-Warm, and Premium Static White, delivering the exceptional quality and precision Lumenpulse is known for. Available in a variety of finishes—or custom color options—it adapts beautifully to any space. Accessories, beam angle, and optics can be easily adjusted in the field for on-site flexibility.

Features

Mounting	Surface Mount
Light Direction	Direct lighting
Length	13 in, 18 in, 23 in
Warranty	5-year limited warranty
Direct Lighting Output (Nominal Lumens)	700lm, 1000lm
Direct Lighting Color Temperature	Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 22K to 65K, Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 22K to 65K
Direct Lighting Optics (Nominal Distribution)	Narrow Spot 15°, Narrow 25°, Medium 40°, Medium Faceted Reflector 40°, Wide 60°, Wide Faceted Reflector 60°, Very Wide 80°, Very Wide Faceted Reflector 80°, True Asymmetric Wallwash, Double Asymmetric
Optical Accessories	Snoot, Half Snoot, Honeycomb Louver, Concentric Ring Louver, Clear Glass Lens, Softening Glass Lens, Prismatic Diffuser, Linear Spread Lens Narrow (1° x 40°), Linear Spread Lens Wide (1° x 60°), Beam Widening Lens (+10°), Beam Widening Lens (+20°), Beam Widening Lens (+30°), Decorative Ring

Color and Color Temperature

Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 22K to 65K

Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 22K to 65K

Control

DMX/RDM

Color Rendering

CRI 90+

Finish

Matte White | Matte Black | Matte Brown | Matte Orange
Matte Green | Matte Blue | Matte Silver | Glossy White
Glossy Black | Glossy Yellow | Glossy Red | Glossy Violet
Glossy Green | Glossy Ivory | Concrete Gray | Metalized Gray
Italian Brick Red | Parget White | Custom Color & Finish

Performance

Maximum Delivered Output	Up to 851 lm Very Wide Faceted Reflector Optic 80°, MRGBWP Optidrive™ Enabled (White 3000K 96+ CRI, DMX/RDM) Up to 889 lm Very Wide Faceted Reflector Optic 80°, MRGBWP Optidrive™ Enabled (White 4000K 95+ CRI, DMX/RDM)
Maximum Delivered Intensity	Up to 3,153 cd Narrow Spot Optic 15°, MRGBWP Optidrive™ Enabled (White 3000K CRI 96+, DMX/RDM) Up to 3,191 cd Narrow Spot Optic 15°, MRGBWP Optidrive™ Enabled (White 4000K CRI 95+, DMX/RDM)
Color Consistency	3 SDCM (in white light color temperatures)
Color Rendering	CRI 90+ (White Light Only)
Lumen Maintenance	L95 55,000 hrs L70 225,000 hrs L95 50,000 hrs (Ta 25 °C)

Physical

Weight	Up to 4.75 lbs
Housing Material	Aluminum
TIR Optics Material	Clear polycarbonate
Reflector Material	Aluminum

Environmental

Environment	Damp location (interior applications only)
Operating Temperature	-4 °F to 86 °F
Ingress Protection Rating	IP20

Electrical and Control

Voltage	120-277 Volts Universal
Control	DMX/RDM Enabled Dimming 0.1%

Accessories (Order Separately)

Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration)
Control Systems	Pharos® Designer Lighting Control Kit (PHAROS), Pharos® Expert Control Kit (EXPERT), Consult Control Systems section for details
Diagnostic and Addressing Tools	LumenID (LID)

Important

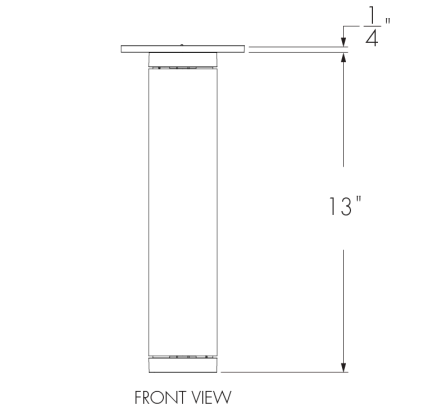
Virtual Patent Marking Notice

This website (https://www.lmpg.com/patents-trademarks) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

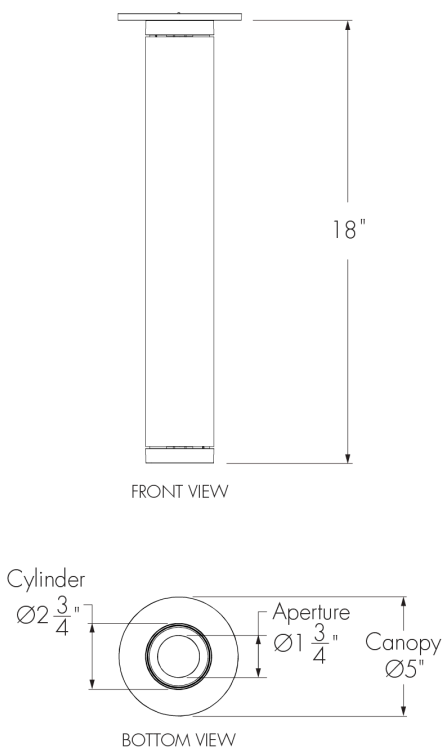
Certifications

Fixture Dimensions

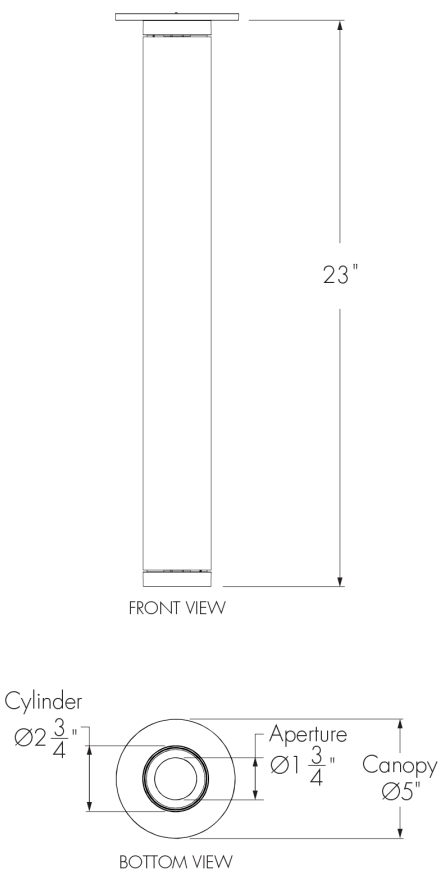
13 in



18 in

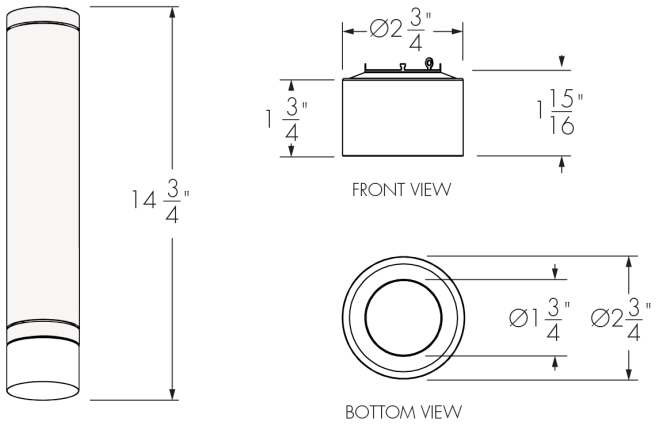


23 in

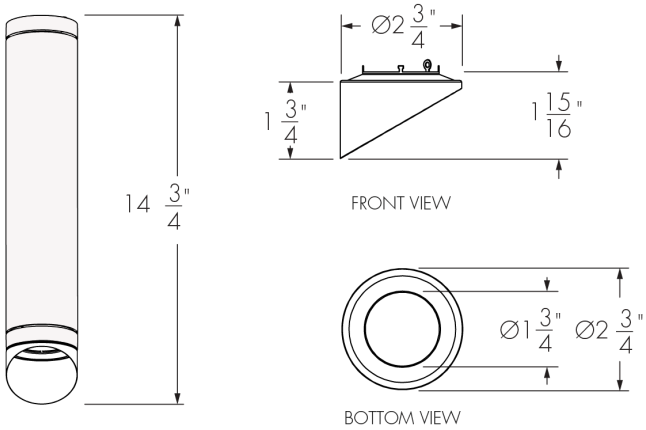


Optical Accessory Dimensions (13 in Fixture Shown)

Snoot



Half Snoot



Photometric Information - Color Rendering Options Comparison, 3000K

Color sample	Ra	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
CRI 90+	94	95	98	99	95	94	97	91	80	55	93	97	83	96	99	89

Optics

TIR Optic
NS/N

Semi-Specular Reflector
M/W/VW

Faceted Reflector
NFR/MFR/WFR/VWFR

Power Consumption

MRGBWP and MRGRBWP

Power Consumption [W]				
	NS (15°) - **N** (25°) - **WW**		**M** (40°) - **MFR** (40°) - **W** (60°) - **WFR** (60°) - **VW** (80°) - **VWFR** (80°) - **DAS**	
Output [lm]	**120 V**	**277 V**	**120 V**	**277 V**
700	14	14	11	11
1000	N/A	N/A	16	16

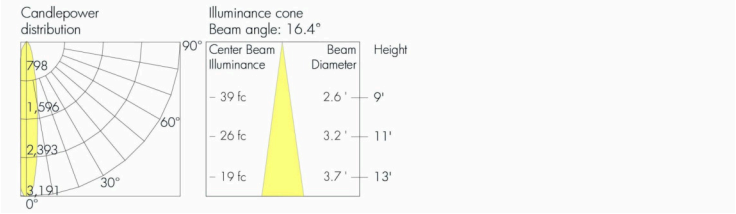
Power Consumption values are based on a MRGBWP or MRGRBWP Full On configuration.

Photometric Information - Direct Lighting Optics

NS - Narrow Spot (Nominal 15°), 4000K

Nominal output [lm] — Delivered output [lm]†

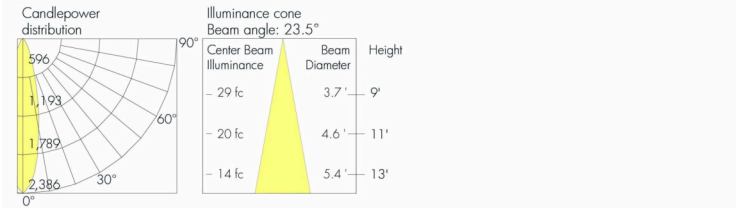
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	602	307	503	123	595	621



N - Narrow (Nominal 25°), 4000K

Nominal output [lm] — Delivered output [lm]†

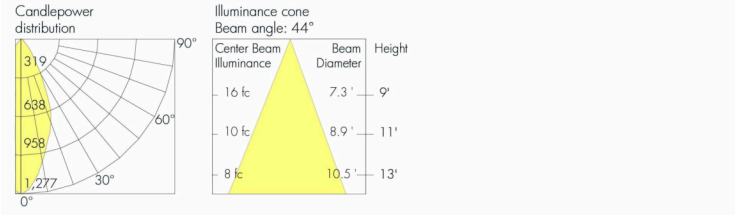
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	603	308	504	124	596	623



M - Medium (Nominal 40°), 4000K

Nominal output [lm] — Delivered output [lm]†

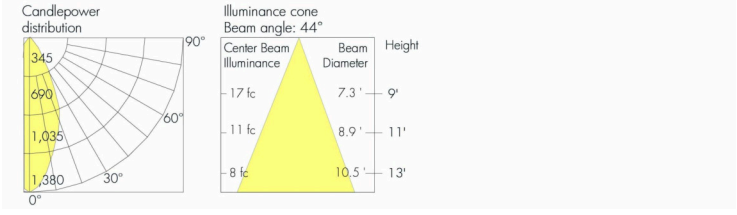
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	435	273	509	129	430	449
1000	702	383	694	183	694	725



MFR - Medium Faceted Reflector (Nominal 40°), 4000K

Nominal output [lm] — Delivered output [lm]†

	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	470	295	549	140	464	485
1000	758	413	750	198	749	782

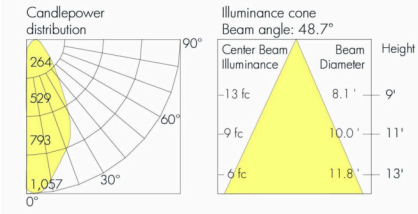


† Consult website for latest IES files. Delivered output: +/- 10% tolerance.
Photometric performance is measured in compliance with IESNA LM-79-24.

W - Wide (Nominal 60°), 4000K

Nominal output [lm] — Delivered output [lm]†

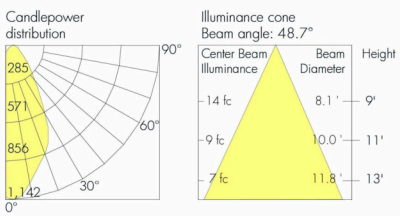
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	481	301	562	143	475	496
1000	775	423	767	202	766	800



WFR - Wide Faceted Reflector (Nominal 60°), 4000K

Nominal output [lm] — Delivered output [lm]†

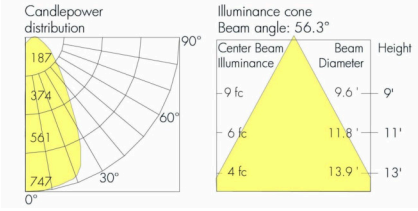
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	519	325	607	154	513	535
1000	837	456	828	218	827	864



VW - Very Wide Reflector (Nominal 80°), 4000K

Nominal output [lm] — Delivered output [lm]†

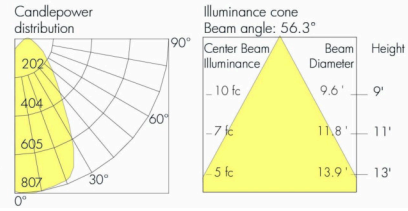
	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	494	310	578	147	488	510
1000	797	434	788	208	788	823



VWFR - Very Wide Faceted Reflector (Nominal 80°), 4000K

Nominal output [lm] — Delivered output [lm]†

	Full On	Red	Green	Blue	White 30K CRI 96+	White 40K CRI 95+
700	534	335	624	159	527	551
1000	861	469	852	225	851	889

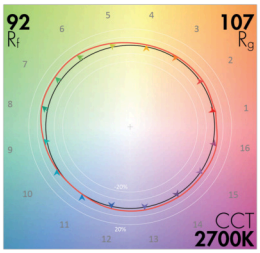


† Consult website for latest IES files. Delivered output: +/- 10% tolerance.
Photometric performance is measured in compliance with IESNA LM-79-24.

TM-30

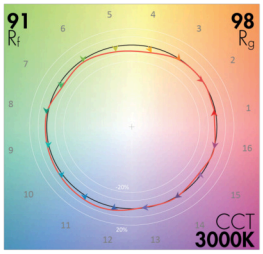
2700K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
2700K	R_a	90	92	R_f
	R_9	76	107	R_g



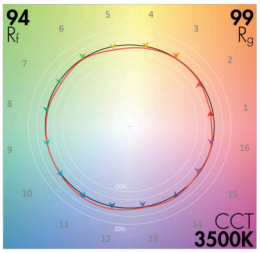
3000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
3000K	R_a	96	91	R_f
	R_9	94	98	R_g



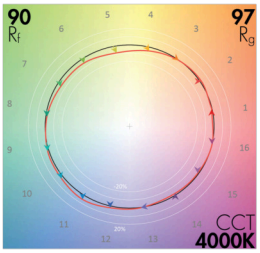
3500K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
3500K	R_a	97	94	R_f
	R_9	83	99	R_g



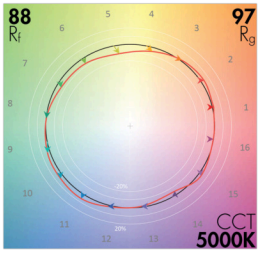
4000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
4000K	R_a	95	90	R_f
	R_9	97	97	R_g



5000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
5000K	R_a	91	88	R_f
	R_9	78	97	R_g



Refer to TM-30 Reference Guide for details.

Optical Accessories

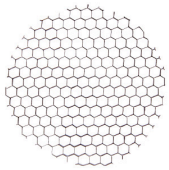
SN - Snoot

LACYN - SN

HSN - Half Snoot

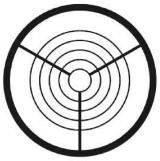
LACYN - HSN

HL - Honeycomb Louver



LACYN - HL

XLVR - Concentric Ring Louver



LACYN- XLVR

CL - Clear Glass Lens

LACYN - CL

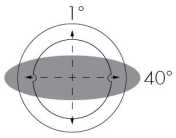
SL - Softening Glass Lens

LACYN - SL

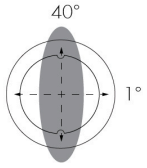
PD – Prismatic Diffuser

LACYN - PD

LSN - Linear Spread Lens Narrow (1° x 40°)



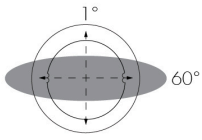
Horizontal Beam Distribution



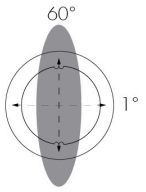
Vertical Beam Distribution

LACYN - LSN

LSW - Linear Spread Lens Wide (1° x 60°)



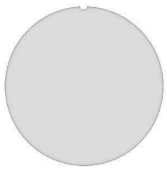
Horizontal Beam Distribution



Vertical Beam Distribution

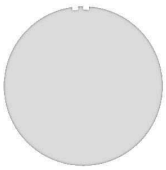
LACYN - LSW

BW1 - Beam Widening Lens (+10°)



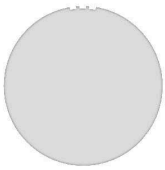
LACYN - BW1

BW2 - Beam Widening Lens (+20°)



LACYN - BW2

BW3 - Beam widening lens (+30°)



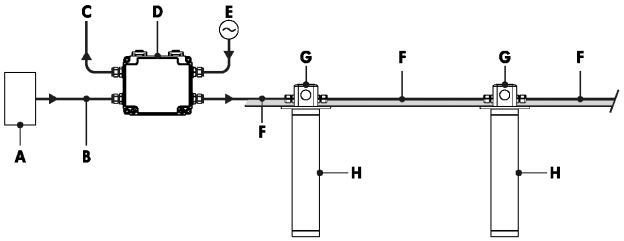
LACYN - BW3

DR - Decorative Ring

LACYN - DR

Typical Wiring Diagrams (Refer to Installation Instructions for Additional Wiring Details)

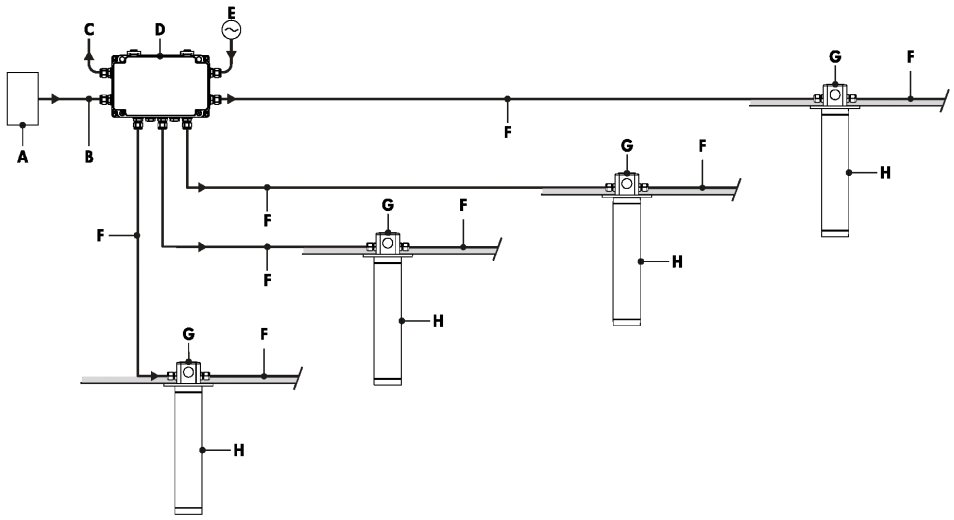
Daisy Chain Layout (DMX/RDM)



A - DMX/RDM controller (to be ordered separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, non-isolated/non-boosted)
D - CBX-DS
E - Power line (120-277V AC, wiring by others)
F - Power and data output to fixture (wiring by others)
G - 4 in Octagonal/round junction box (by others)
H - Lumencore Cylinder Nano Surface Mount

The DMX/RDM protocol states a maximum of 64 DMX/RDM enabled fixtures on any single run.
Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
Maximum of 1 output per CBX-DS.
Each fixture requires 1, 2, 3, 4, or 5 DMX addresses depending on control mode selected onsite.
DMX terminator is required at the end of each run to maintain data integrity. Two (2x) DMX lumenterminators included per CBX-DS. See installation instructions for details.

Daisy Chain Layout (DMX/RDM)

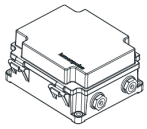
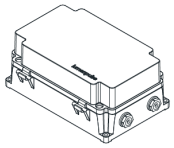


A - DMX/RDM controller (to be ordered separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, non-isolated/non-boosted)
D - CBX-ST
E - Power line (120-277V AC, wiring by others)
F - Power and data output to fixture (wiring by others)
G - 4 in Octagonal/round junction box (by others)
H - Lumencore Cylinder Nano Surface Mount

The DMX/RDM protocol states a maximum of 64 DMX/RDM enabled fixtures on any single run.
Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
Maximum of 6 outputs per CBX-ST.
Each fixture requires 1, 2, 3, 4, or 5 DMX addresses depending on control mode selected onsite.
DMX terminator is required at the end of each run to maintain data integrity. Six (6x) DMX lumenterminators included per CBX-ST. See installation instructions for details.

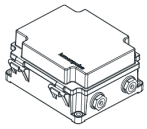
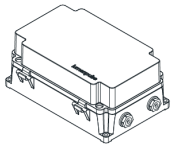
Control Boxes (Order Separately)

CBX-DMX/RDM - DMX/RDM Enabled (Daisy Chain or Star Configuration)

DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for Daisy Chain configuration, 6x for Star configuration), consult factory to order spares.

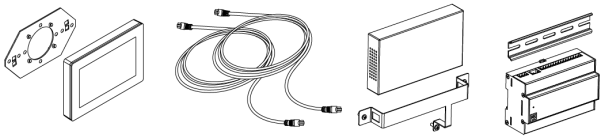
CBX-ENET - Ethernet Enabled (Daisy Chain or Star Configuration)

Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

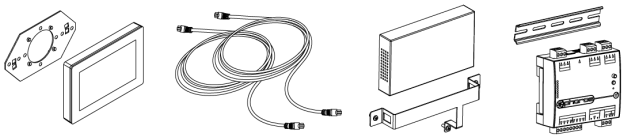
Control Systems (Order Separately)

PHAROS - Pharos® Designer Lighting Control Kit



The Pharos Designer Lighting Contol Kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations.

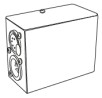
EXPERT - Pharos® Expert Control Kit



The Pharos Expert Control Kit, available for 1, 2, 4 or 6 DMX universes, allows for complete control of large lighting installations.

Diagnostic And Addressing Tools (Order Separately)

LID - LumenID



The updated LumenID (LID) is an all-in-one diagnostic and addressing solution for both DMX/RDM and Lumentalk (LT) systems. Engineered for versatility, it streamlines commissioning and troubleshooting across protocols—no need for multiple tools. Cable option may vary; please consult factory. For complete details, refer to the LID specification sheet.

How to Order

Housing [1]	Certification	Mounting	Light Direction	Voltage	Length	Direct Lighting Output (Nominal Lumens)	Direct Lighting Color Temperature [3]	Direct Lighting Color Rendering	Direct Lighting Optics (Nominal Distribution)
LACYN Lumencore Cylinder Nano - Ø2 3/4 in	**A** UL/cUL	**SM** Surface Mount	**D** Direct lighting	**120/277** 120-277 Volts Universal	**13** 13 in **18** 18 in **23** 23 in	**dL07** 700lm **dL10** 1000lm [2]	**MRGBWP** Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 22K to 65K [4] [5] **MRGRBWP** Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 22K to 65K [5] [6]	**CR90** CRI 90+ (White Light Only)	**NS** Narrow Spot 15° [7] **N** Narrow 25° [7] **M** Medium 40° **MFR** Medium Faceted Reflector 40° **W** Wide 60° **WFR** Wide Faceted Reflector 60° **VW** Very Wide 80° **VWFR** Very Wide Faceted Reflector 80° **WW** True Asymmetric Wallwash [7] [8] [9] **DAS** Double Asymmetric [8] [10]

Notes:

1. Refer to website product configurator for all exceptions.
2. Not available with NS, N and WW optics.
3. White Channel Set Point or Warm Dimming Range is adjustable at commissioning. Consult Opticolor+ Personality Guide for details.
4. CRI 90 applies only to white light color temperatures from 2700K to 5000K.
5. Fixtures are shipped from the factory in Optidrive™ Mode. Normal Mode can be activated onsite for DMX/RDM fixtures. For DMX/RDM applications, Optidrive Mode requires a LumenID, LumenID software and onsite commissioning. Additionally, with Opticolor+™ the white CCT is configurable in the field from 2200K-8000K.
6. CRI 90 applies only to white light color temperatures from 2700K to 6500K.
7. Available up to 700 lumens.
8. Optical accessories are not available for WW or DAS optics.
9. The color of the true asymmetric wallwash baffle matches the fixture bezel.
10. The color of the double asymmetric baffle is metallic gray.

How to Order

Direct Lighting Control	Direct Lighting Accessories [8] [13] [14]	Finish	Bezel	Bezel Finish
DMX/RDM DMX/RDM Enabled Dimming 0.1% [11] [12]	**NA** No Accessory **SN** Snoot [15] **HSN** Half Snoot [15] **HL** Honeycomb Louver [16] **XLVR** Concentric Ring Louver [17] [18] **CL** Clear Glass Lens **SL** Softening Glass Lens **PD** Prismatic Diffuser [19] **LSN** Linear Spread Lens Narrow (1° x 40°) [20] [21] **LSW** Linear Spread Lens Wide (1° x 60°) [21] [22] **BW1** Beam Widening Lens (+10°) [21] **BW2** Beam Widening Lens (+20°) [21] **BW3** Beam Widening Lens (+30°) [21] **DR** Decorative Ring [23]	**MWH** Matte White **MBK** Matte Black **MBR** Matte Brown **MOR** Matte Orange **MGR** Matte Green **MBL** Matte Blue **MSI** Matte Silver **GWH** Glossy White **GBK** Glossy Black **GYL** Glossy Yellow **GLR** Glossy Red **GVI** Glossy Violet **GGR** Glossy Green **GIY** Glossy Ivory **CGY** Concrete Gray **MLG** Metalized Gray **IBR** Italian Brick Red **PWH** Parget White **CC** Custom Color & Finish [24]	**b** Bezel	**MWH** Matte White **MBK** Matte Black **MBR** Matte Brown **MOR** Matte Orange **MGR** Matte Green **MBL** Matte Blue **MSI** Matte Silver **GWH** Glossy White **GBK** Glossy Black **GYL** Glossy Yellow **GLR** Glossy Red **GVI** Glossy Violet **GGR** Glossy Green **GIY** Glossy Ivory **CGY** Concrete Gray **MLG** Metalized Gray **IBR** Italian Brick Red **PWH** Parget White **CC** Custom Color & Finish [24]

Notes:

8. Optical accessories are not available for WW or DAS optics.
11. A Control Box (CBX-DS or CBX-ST) and lumenID (LID) must be specified.
12. Configurable to 3, 4, or 5 channel control via RDM in the field.
13. Accessories specified in the fixture code are factory installed but can also be changed in the field. Refer to installation instructions for details. To order accessories separately, refer to the Optical Accessories section of the specification sheet.
14. Maximum of two lenses can be installed per fixture. The Snoot (SN) or Half Snoot (HSN) can be combined with any accessory. The Clear Glass Lens (CL) and Softening Glass Lens (SL) cannot be combined together. The Linear Spread Lenses (LSN and LSW) are compatible with the Snoot and Half Snoot accessories only.
15. Matte black interior surface, exterior finish matches housing color.
16. When combined with another accessory, the HL will be factory-installed in second position (furthest from the LED source).
17. Available for NS optic only.
18. Can be combined with PD accessory only.
19. Recommended to be combined with HL or XLVR accessory only.
20. Nominal 10° x 40° distribution when used with the NS optic.
21. For optimal performance, it is not recommended to mix with other accessories.
22. Nominal 10° x 60° distribution when used with the NS optic.
23. No other accessories can be combined with the decorative ring accessory. A decorative ring replaces the bezel on a fixture. Do not specify a bezel finish.
24. Longer lead times can be expected for custom RAL color finishes.