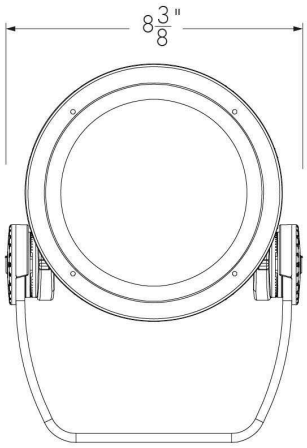
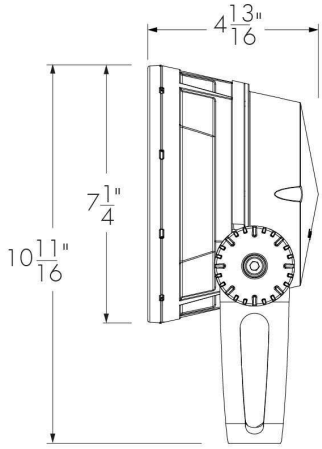
Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____



Front view



Side view

Photometric Summary

Symmetric

	Delivered output (lm)	Intensity (peak cd)
XN (3°)	2,381	331,811
VN (6°)	1,888	99,894
NS (10°)	2,714	38,895
NF (20°)	2,567	24,613
M (30°)	2,490	13,855
FL (40°)	2,252	5,837
WFL (60°)	2,020	1,520

Asymmetric

NAS	1,726	28,602 (@2.5°)
WW	2,363	3,940 (@5°)

Based on 4000K configuration.
Photometric performance is measured externally in compliance with IESNA LM-79-24.
Refer to Photometric Guide on Lumenpulse website for information on other color temperatures.

Description

The Lumenbeam Medium is an IP66-rated luminaire for lighting landscapes, trees, columns, monuments, and architectural details. It has numerous options, including optics for flood or accent lighting, a choice of color temperatures and colors, as well as various accessories, spread lenses, and controls. The luminaire also has an anti-corrosion option for use in harsh, chemical, or coastal environments.

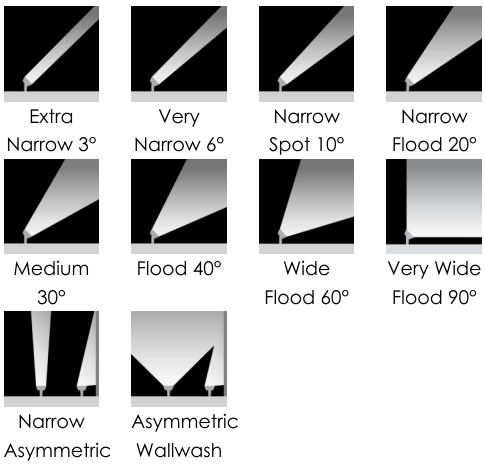
Features

Color and Color Temperature	**22K:** 2200K, **27K:** 2700K, **30K:** 3000K, **35K:** 3500K, **40K:** 4000K, **57K:** 5700K, **RD:** Red, **GR:** Green, **BL:** Blue
Optics (Nominal Distribution)	**XN:** Extra Narrow 3°, **VN:** VN (6°), **NS:** NS (10°), **NF:** NF (20°), **M:** M (30°), **FL:** FL (40°), **WFL:** WFL (60°), **VWFL:** VWFL (90°), **NAS:** NAS (Narrow Asymmetric), **WW:** WW (Asymmetric Wallwash)
Optical Option	**LSLH:** Linear Spread Lens Horizontal Distribution, **LSLV:** Linear Spread Lens Vertical Distribution
Option	**SY:** Short Yoke, **SRY:** Short Rotational Yoke, **RY:** Rotational Yoke, **3GV:** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications, **CRC:** Corrosion-Resistant Coating for Hostile Environments
Cable Color	**BK:** Black, **WH:** White
Power Consumption	28 W
Warranty	5-year limited warranty

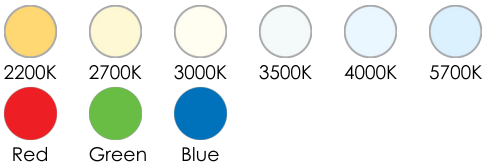
Performance

Maximum Delivered Output	2,714 lm (4000K, NS 10°)
Maximum Delivered Intensity	331,811 cd at nadir (4000K, XN 3°)
Illuminance at Distance	Minimum 1 fc at 578 ft (4000K, XN 3°)
Color Consistency	3 SDCM

Optic



Color and Color Temperature



Control

Ratings

IP66 IK09

Certifications

Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 > 250,000 hrs (Ta 25 °C) (> 80,000 hrs for XN 3°, VN 6°, NAS optics only)

Physical

Housing Material	Low copper content high pressure die-cast aluminum
Yoke Material	Heavy aluminum (standard yoke included)
Lens Material	Clear tempered glass
Hardware Material	Stainless steel
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	6.7 lbs
EPA	Front = 0.44 ft², Side = 0.18 ft²

Electrical and Control

Voltage	100 to 277 volts
Fixture Cable	Power and data in one cable
Conductors	3C #16-3 (NO control), 5C #16-5 (DIM, DALI control), 6C #14-3/ #24-3 (DMX/RDM control)
Control	On/Off Control, 0-10V Dimming, DALI Dimming, DMX/RDM Enabled, Lumentalk system is enabled with LDB accessory - see typical wiring diagrams for details
Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit

Environmental

Storage Temperature	-40 °F to 158 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP66, Wet location rated
Impact Resistance Rating	IK09
Application Wind Speed	Luminaires were designed based on AASHTO 2013 standard to ensure highest quality and safety. Installation should be validated by a local project engineer to ensure the luminaires are suitable for the wind speed and exposure of the specific application

Accessories (Order Separately)

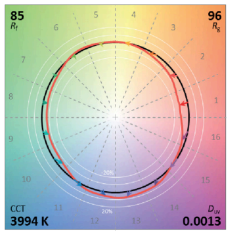
Optical Accessories	Lumenbeam Medium Snoot, Lumenbeam Medium Snoot Wide, Lumenbeam Medium Visor, Lumenbeam Medium Linear Spread Lens Adjustable, Lumenbeam Medium Wire Guard, Lumenbeam Medium Dome Lens
Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration), Lumentalk Data Bridge

Control Systems	Lumenscene™ (LSC), Pharos® Lighting Control Kit (PHAROS)
Diagnostic and Addressing Tools	LumenID (LID)

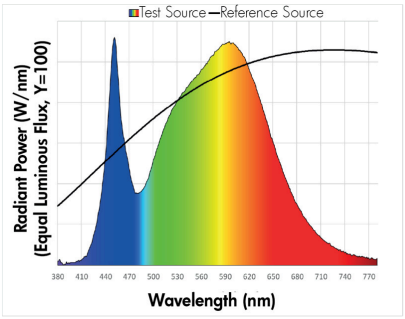
Chromaticity Data

TM-30 - 4000K

CCT	CIE		TM-30	
4000K	R_a	83	85	R_f
	R_9	14	96	R_g

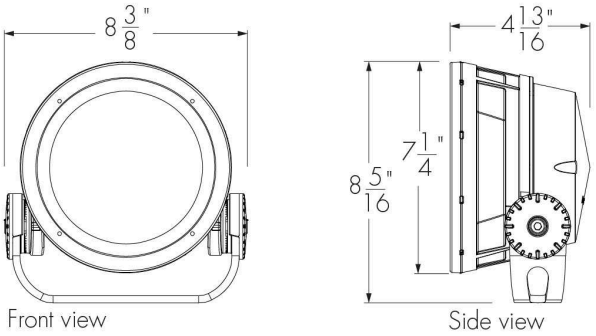


Spectral Power Distribution

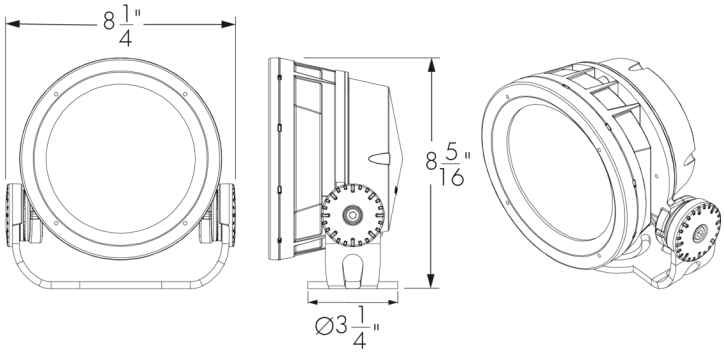


Mounting Options

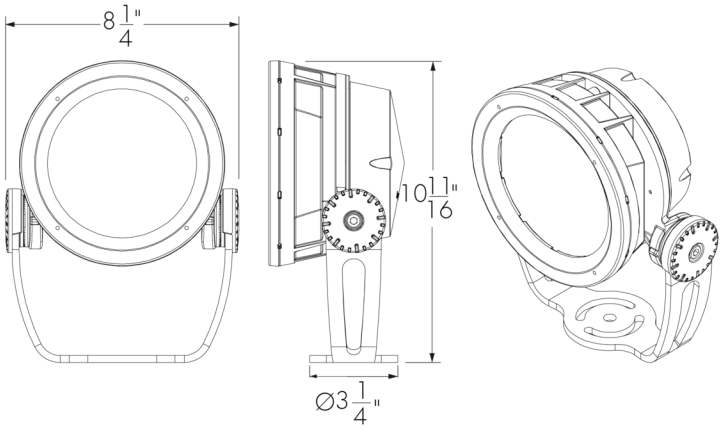
SY - Short Yoke



SRY - Short Rotational Yoke

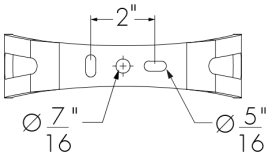


RY - Rotational Yoke



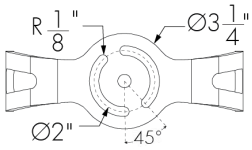
Mounting Details

Mounting Hole Pattern - Standard And Short Yoke



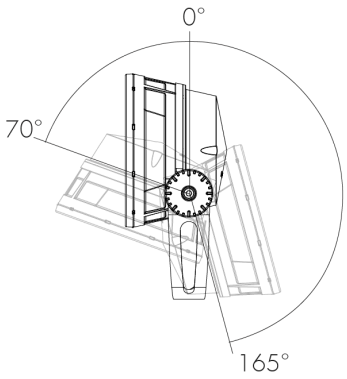
3 bolts are required for wind and vibration resistance, provided by others.

Mounting Hole Pattern - Rotational Yoke

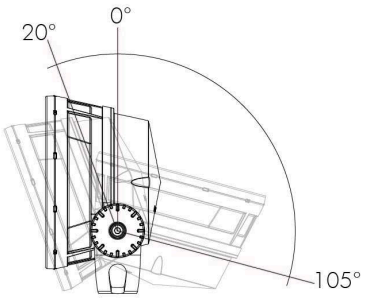


3 bolts are required for wind and vibration resistance, provided by others.

Adjustable Pivot Limits



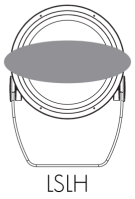
Standard Yoke



Short Yoke

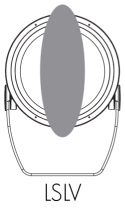
Optical Options

LSLH - Linear Spread Lens Horizontal Distribution



LSLH - Linear spread lens horizontal distribution

LSLV - Linear Spread Lens Vertical Distribution



Beam Angles

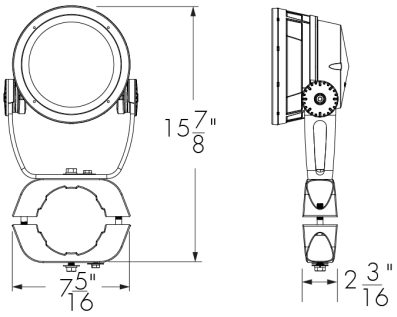
Optic installed in fixture	Beam angle with LSLH/LSLV
XN	5° x 60°
VN	7° x 60°
NS	13° x 66°
NF	16° x 62°
M	23° x 65°
FL	33° x 70°

LLF: 0.88*
*LLF may vary slightly by distribution chosen.

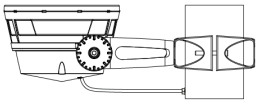
Factory installed, not adjustable on site. Not available for WFL, VWFL, NAS and WW optics.
See 'Optical Accessories' section for field adjustable spread lens (LSLA).

Mounting Accessories (Order Separately)

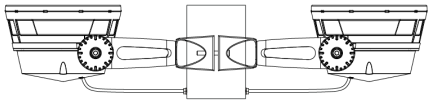
Round Pole Mounting Accessory



PM4 model shown.
Consult factory for square pole section.



PM4-1, PM4.5-1, PM5-1 - Round pole mounting accessory - single fixture

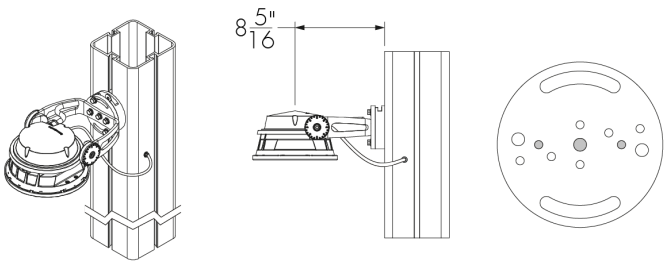


PM4-2, PM4.5-2, PM5-2 - Round pole mounting accessory - twin fixtures
*One bracket assembly is supplied per 2 fixtures unless otherwise specified.

	PM4	PM4.5	PM5
For pole Ø	$4" \pm \frac{1"}{16}$	$4.5" \pm \frac{1"}{16}$	$5" \pm \frac{1"}{16}$

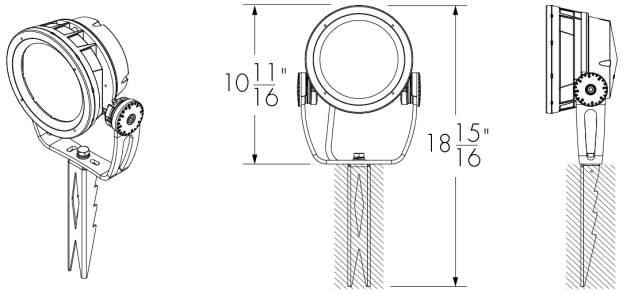
Consult factory for other pole diameters.

PLTU - Universal Yoke

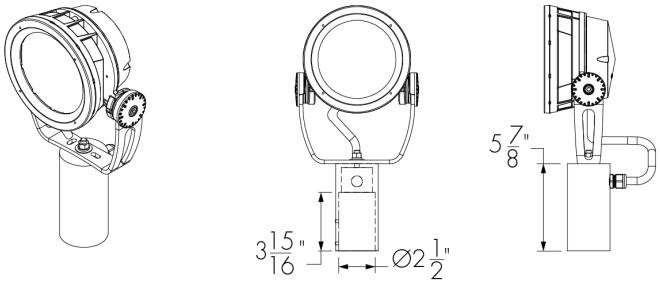


Refer to the Universal Yoke specification sheet and Pole installation instructions for more details. Square Lumentech profile shown. The mounting holes used for this fixture are shown in gray.

SK - Stake Mounting

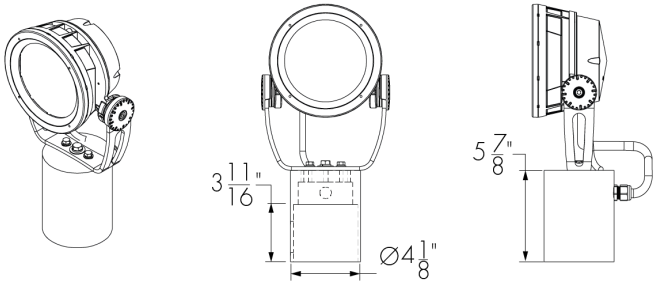


Tenon Adapter



TN2 - Tenon adapter to fit on 2 3/8 in O.D. tenon

Vertical mounting only. Consult factory for horizontal mounting.



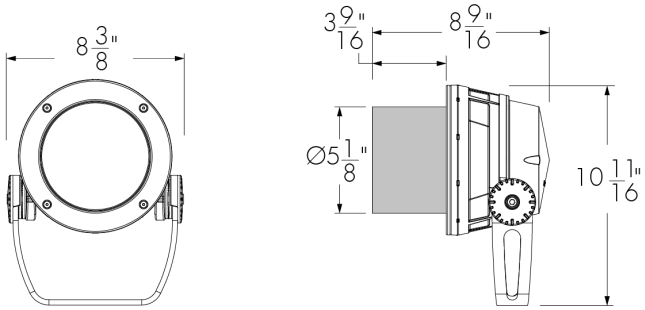
TN4 - Tenon adpater to fit on 4 in O.D. tenon

Vertical mounting only. Consult factory for horizontal mounting.

Optical Accessories (Order Separately)

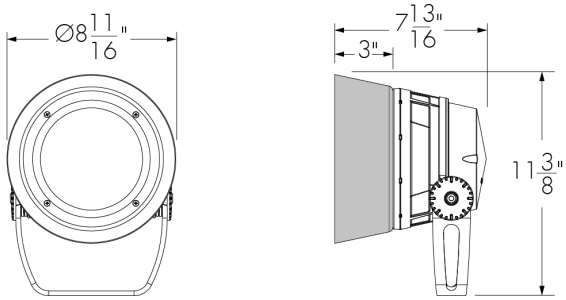
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.

SN - Snoot



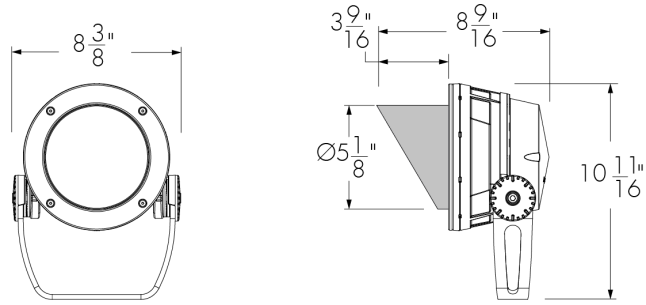
LBMSN-**FINISH**-BK-**OPTIONS** (CRC)
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

SNW - Snoot Wide



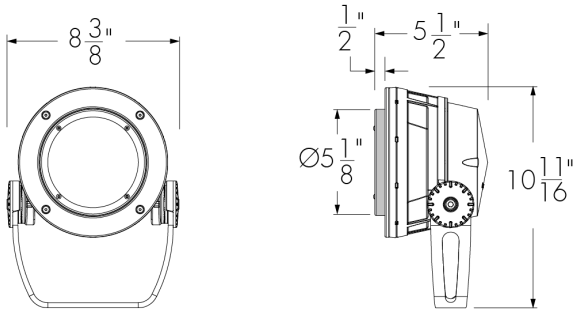
LBMSNW-**FINISH**-BK-**OPTIONS** (CRC)
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

VS - Visor



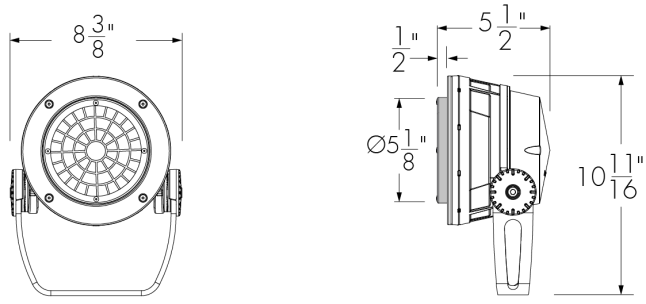
LBMVS-**FINISH**-BK-**OPTIONS** (CRC)
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

LSLA - Linear Spread Lens Adjustable



LBMLSLA-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

WG - Wire Guard



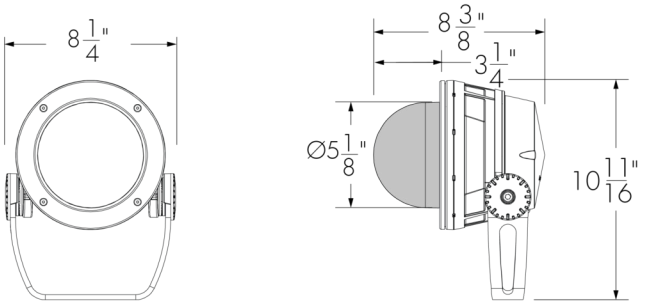
LBMWG-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

Accessory Combinations

+	Snoot	Snoot wide	Visor
Linear spread lens adjustable	LBMSNLSLA	N/A*	LBMVSLSLA
Wire guard	LBMSNWG	N/A	LBMVSWG

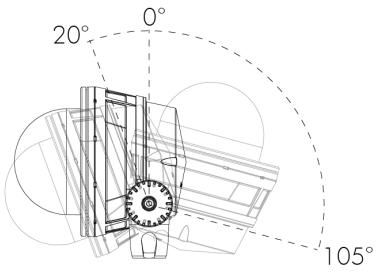
Accessory combinations must be ordered together on a single line.
Ex: A snoot + wire guard combination order code is LBMSNWG-**FINISH**-BK-**OPTIONS**. A maximum of two accessories can be combined per fixture.
*Consult factory for a linear spread lens adjustable + snoot wide combination.

DM - Dome Lens

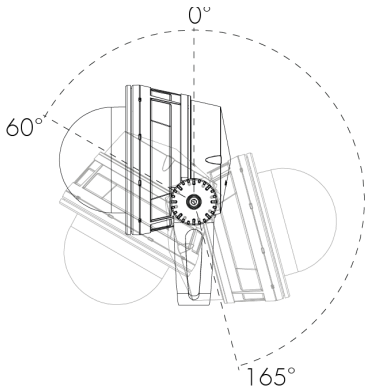


LBMDM-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

Dome - Short Yoke - Pivot limits



Dome - Standard Yoke - Pivot limits



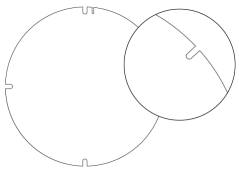
Dome Lens is available with WFL Optic only. The WFL optic must be specified for the fixture.

Dome Lens cannot be combined with other optical accessories.

Dome Lens will affect beam distribution. Consult factory for application support and photometric performance.

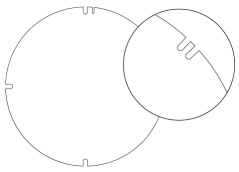
Diffuser Lenses (Intended for Mockup Purposes Only, Order Separately)

Diffuser Lens 1 (1 Notch)



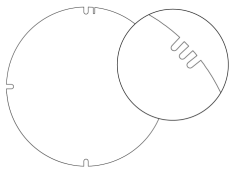
147671

Diffuser Lens 2 (2 Notches)



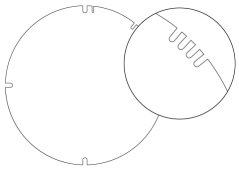
147672

Diffuser Lens 3 (3 Notches)



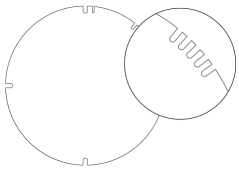
147673

Diffuser Lens 4 (4 Notches)



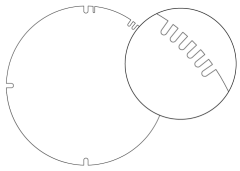
147674

Diffuser Lens 5 (5 Notches)



147675

Diffuser Lens 6 (6 Notches)



147676

Final Distribution Using Diffuser Lenses

	Final Distribution Using Diffuser Lens					
Original Distribution on Fixture	**Diffuser Lens 1 1 Notch**	**Diffuser Lens 2 2 Notches**	**Diffuser Lens 3 3 Notches**	**Diffuser Lens 4 4 Notches**	**Diffuser Lens 5 5 Notches**	**Diffuser Lens 6 6 Notches**
XN (4°/5°)	VN	NS	NF	M	FL	VWFL
VN (6°)	NS					
NS (10°)						
NF (20°)						
M (30°)				FL	VWFL	
FL (40°)						
WFL (60°)						VWFL
VWFL (90°)						

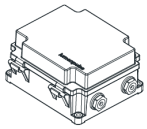
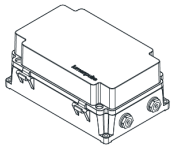
Choose a diffuser lens based on the desired final beam distribution. Refer to the 6-digit part numbers above to order diffuser lenses individually. To order a complete set of 6 diffuser lenses in a bag, refer to the following item names: **LBS:** LBALK-S **LBM/LBMP:** LBALK-M **LBL/LBLP**: LBALK-L **LBG/LBGP:** LBALK-G **LBX/LBXP:** LBALK-X.

The diffuser lenses are intended for mockup purposes only. A lens holder is required to install a diffuser lens on the fixture, order separately using the following names: **LBS:** LBSLSLA-**FINISH**-LBALK **LBM/LBMP:** LBMLSLA-**FINISH**-LBALK **LBL/LBLP:** LBLLSLA-**FINISH**-LBALK **LBG/LBGP:** LBGLSLA-**FINISH**-LBALK **LBX/LBXP:** LBXLSLA-**FINISH**-LBALK

Please specify the exterior **FINISH** from the list of finishes in the fixture order code.
Refer to the Diffuser Lens Installation Instructions on the Lumenpulse website for information on installing the diffuser lenses.

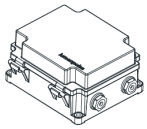
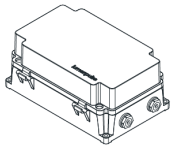
Control Boxes (Order Separately)

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

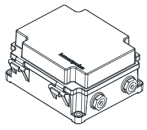
DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for daisy chain configuration, 6x for star configuration), consult factory to order spares.

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.

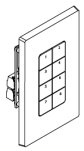
LDB - Lumentalk Data Bridge



Lumentalk Data Bridge, 0-10V or DMX output. Consult LDB specification sheet for details.

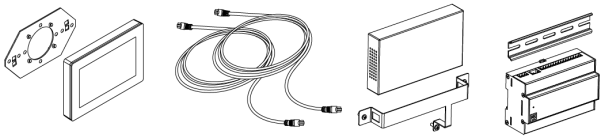
Control Systems (Order Separately)

Lumenscene



The Lumenscene, a user-friendly DMX/RDM lighting controller that includes eight preconfigured scene changes and can be programmed via RDM.

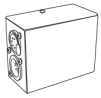
PHAROS - Pharos® Kit



The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic And Addressing Tools (Order Separately)

LID - LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Consult LID specification sheet for details.

EPA Guide

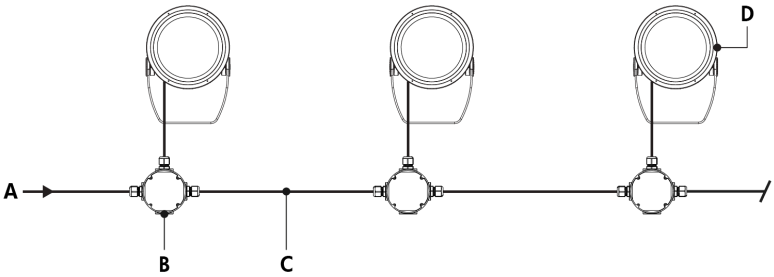
	LBM	LBM with Snoot	LBM with Visor	LBM with Snoot Wide	LBM with Dome Lens
					
EPA front (sq ft)	0.437	0.437	0.437	0.578	0.437
EPA side (sq ft)	0.178	0.317	0.317	0.301	0.083

Typical Wiring Diagrams

Wiring Color Code

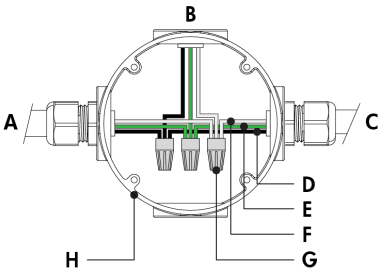
UL Color Code	USE
Green	Ground
Black	Line
White	Line/Neutral
Red or Purple	0-10V / Data +
Orange	0-10V / Data -
Gray	Signal common (DMX/RDM only)

On/Off Control (NO)



A - Power input (100-277V AC, wiring by others)
B - Junction box (by others)
C - Power wiring (by others)
D - Lumenbeam Medium

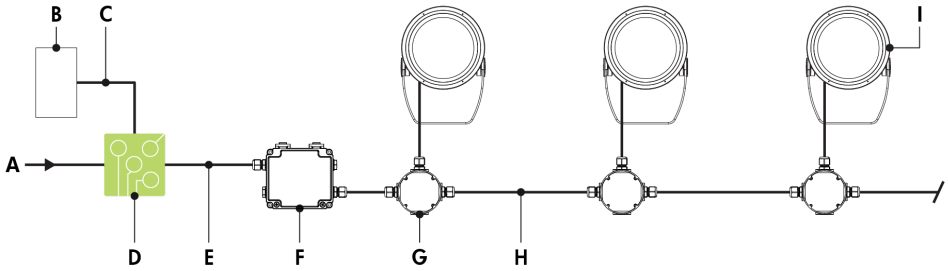
On/Off Control (NO) - Wiring Detail



A - Power input or from previous fixture
B - To fixture
C - To next fixture
D - Line
E - Ground
F - Line/Neutral
G - Wire-nut (by others)
H - Junction box (by others)

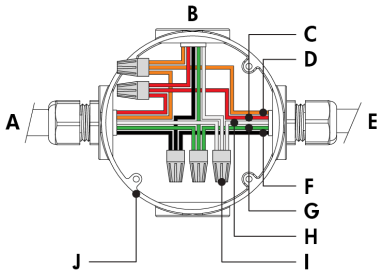
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 28 watts per fixture.

Lumentalk (LT)



A - Power input (100-277V AC, wiring by others)
B - Dimmer/controller (order separately from Lumenpulse, or by others)
C - Data wiring (by others)
D - Lumentranslator 2 (LTL2-DIM, -DMX, -TRIAC, -DALI)
E - Power wiring (by others)
F - Lumentalk Data Bridge (LDB-DIM or LDB-DMX)
G - Junction box (by others)
H - Power and data wiring (by others)
I - Lumenbeam Medium

Lumentalk (LT) - Wiring Detail Using LDB



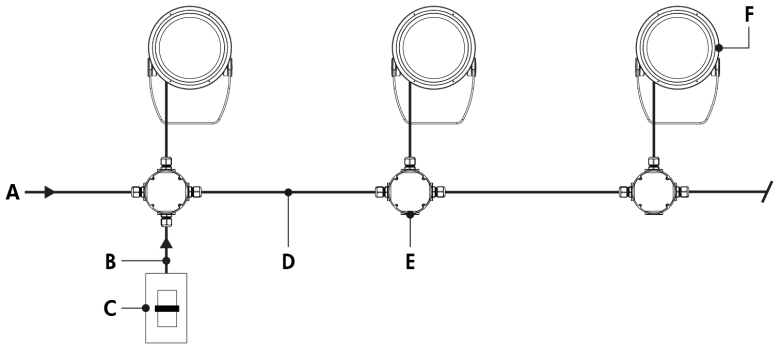
A - From Lumentalk Data Bridge (control over power line via Lumentalk system) or from previous fixture
B - To fixture
C - 0-10 V + / Data +
D - 0-10 V - / Data -
E - To next fixture
F - Line
G - Ground
H - Line/Neutral
I - Wire-nut (by others)
J - Junction box (by others)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for Lumentalk system, see LDB installation instructions for details.

- For applications with all fixtures controlled as 1 zone: fixtures and Lumentalk Data Bridge must be specified as DIM. Maximum of 10 fixtures per LDB-DIM, consult factory for applications that require additional capabilities.
- For applications with fixtures controlled individually: fixtures and Lumentalk Data Bridge must be specified as DMX, 2-step commissioning process: 1 - DMX/RDM system using LumenID software and a LID, 2 - Lumentalk system using LumentalkID software and a LID-LT. Maximum of 32 fixtures per LDB-DMX. Consult factory for details.

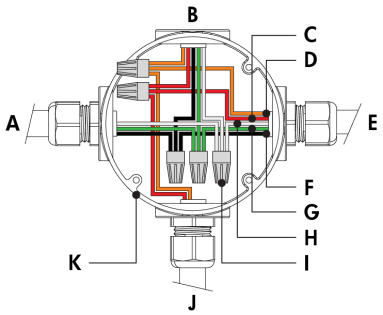
- For DMX applications: 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colors is 1 minute). Consult factory for applications that require additional capabilities.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- Consult factory for DALI Lumentalk applications.
- 1% minimum dimming value.
- 28 watts per fixture.

0-10V Dimming (DIM)



A - Power input (100-277V AC, wiring by others)
B - Data wiring (by others)
C - Dimmer (by others)
D - Power and data wiring (by others)
E - Junction box (by others)
F - Lumenbeam Medium

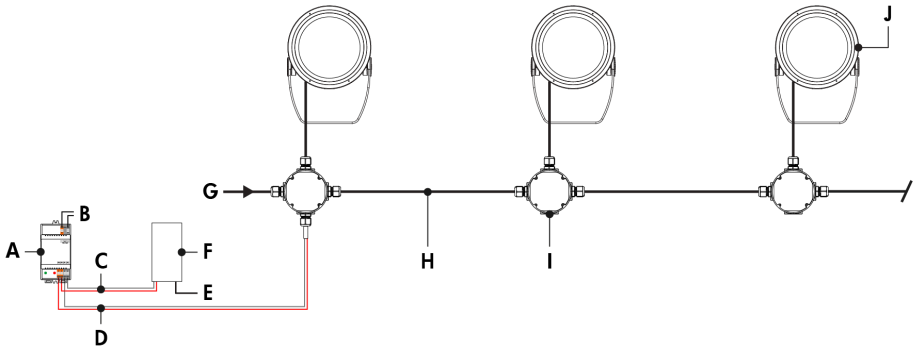
0-10V Dimming (DIM) - Wiring Detail



A - Power input or from previous fixture
B - To fixture
C - 0-10 V +
D - 0-10 V -
E - To next fixture
F - Line
G - Ground
H - Neutral
I - Wire-nut (by others)
J - From dimmer (by others)
K - Junction box (by others)

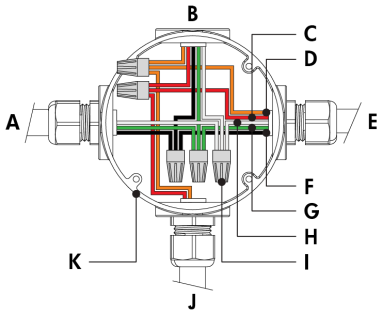
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- 1% minimum dimming value.
- 28 watts per fixture.

DALI Dimming (DALI)



A - DALI bus power supply (by others)
B - Power input for DALI bus power supply (wiring by others)
C - Data output to DALI controller (wiring by others)
D - Data output to fixture (wiring by others)
E - Power input for DALI controller (if required, wiring by others)
F - DALI controller (by others)
G - Power input (100-277V AC, wiring by others)
H - Power and data wiring (by others)
I - Junction box (by others)
J - Lumenbeam Medium

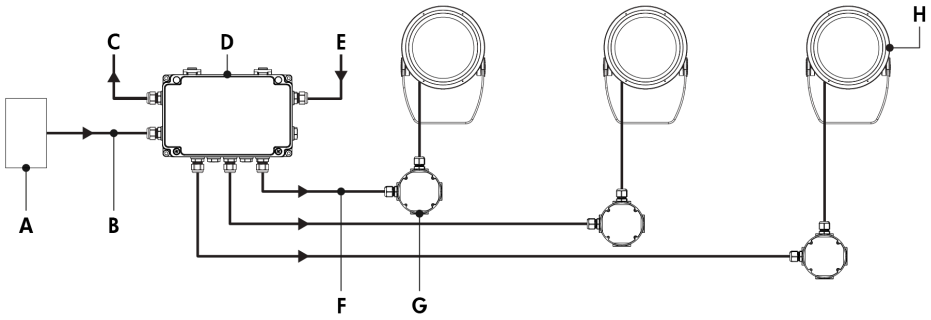
DALI Dimming (DALI) - Wiring Detail



A - Power input or from previous fixture
B - To fixture
C - DA +
D - DA -
E - To next fixture
F - Line
G - Ground
H - Neutral
I - Wire-nut (by others)
J - From DALI controller (by others)
K - Junction box (by others)

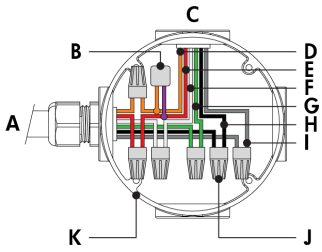
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.
- 1% minimum dimming value.
- 28 watts per fixture.

Star Layout (DMX/RDM)



A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-ST
E - Power input (100-277V AC, wiring by others)
F - Power and data output to fixture (wiring by others)
G - Junction box (by others)
H - Lumenbeam Medium

Star Layout (DMX/RDM) - Wiring Detail



A - From CBX
B - Lumenterminator
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Line
I - Signal common
J - Wire-nut (by others)
K - Junction box (by others)

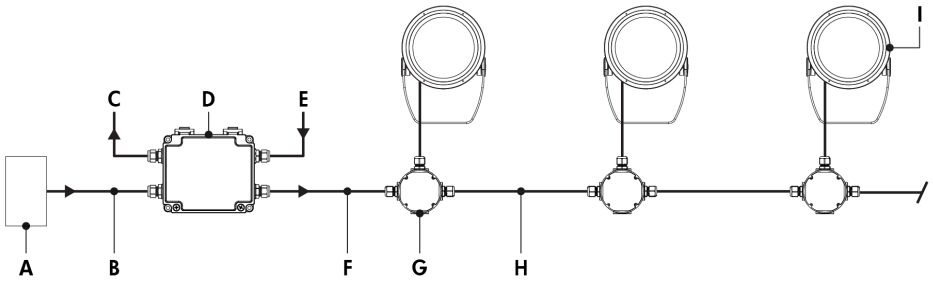
Maximum Fixture Count Per Run

Configuration/Voltage	**120V**	**208V**	**240V**	**277V**
LBM	29	32	32	32

Based on 15A maximum, 16AWG cable, fixtures spaced 10 ft on center, first fixture 50 ft from CBX.

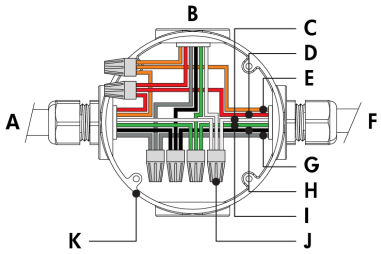
- Consult CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST.
- Each fixture requires 1 DMX address.
- 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.
- 1% minimum dimming value.
- 28 watts per fixture.

Daisy Chain Layout (DMX/RDM)



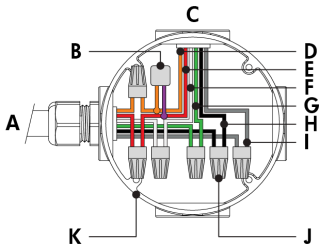
A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-DS
E - Power input (100-277V AC, wiring by others)
F - Power and data output to fixture (wiring by others)
G - Junction box (by others)
H - Power and data wiring (by others)
I - Lumenbeam Medium

Daisy Chain Layout (DMX/RDM) - Wiring Detail (First or Middle of Run)



A - From CBX or previous fixture
B - To fixture
C - Neutral
D - Data +
E - Data -
F - To next fixture
G - Signal common
H - Line
I - Ground
J - Wire-nut (by others)
K - Junction box (by others)

Daisy Chain Layout (DMX/RDM) - Wiring Detail (End of Run)



A - From CBX or previous fixture
B - Lumenterminator
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Line
I - Signal common
J - Wire-nut (by others)
K - Junction box (by others)

Maximum Fixture Count Per Run

Configuration/Voltage	120V	208V	240V	277V
LBM	29	32	32	32

Based on 15A maximum, 16AWG cable, fixtures spaced 10 ft on center, first fixture 50 ft from CBX.

- Consult CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 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.
- Maximum of 3 ft cable length between fixture and next junction box for daisy chain layout.
- Each fixture requires 1 DMX address.
- 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.
- 1% minimum dimming value.
- 28 watts per fixture.

How to Order

Housing	Voltage	Color and Color Temperature (1)	Optic	Optical Option (7) (9)	Finish	Control (13) (14)	Option	Certification	Cable Length (16) (21)	Cable Color	Buy America.n Act
LBM Lumenbeam™ Medium	**100** 100 Volts **120** 120 Volts **208** 208 Volts **220** 220 Volts **240** 240 Volts **277** 277 Volts	**22K** 2200K **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **57K** 5700K **RD** Red (2) (3) **GR** Green (2) (3) **BL** Blue (2) (3)	**XN** Extra Narrow 3° (4) **VN** Very Narrow 6° (4) **NS** Narrow Spot 10° (4) **NF** Narrow Flood 20° (4) **M** Medium 30° (4) **FL** Flood 40° (4) **WFL** Wide Flood 60° (4) (5) **VWFL** Very Wide Flood 90° (4) (6) **NAS** Narrow Asymmetric (4) **WW** Asymmetric Wallwash (4)	**LSLH** Linear Spread Lens Horizontal Distribution (8) **LSLV** Linear Spread Lens Vertical Distribution (8)	**BK** Black Sandtex® **BRZ** Bronze Sandtex® **SI** Silver Sandtex® **WH** Smooth White **BKTX** Textured Black **BRZTX** Textured Bronze Non-Metallic **GRATX** Textured Medium Gray **GRNTX** Textured Green **WHTX** Textured White **CC** Custom Color & Finish (10) (11) (12)	**NO** On/Off Control **DIM** 0-10V Dimming **DALI** DALI Dimming **DMX/RDM** DMX/RDM Enabled (15) (16)	**SY** Short Yoke **SRY** Short Rotational Yoke (17) **RY** Rotational Yoke (17) **3GV** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications **CRC** Corrosion-Resistant Coating (18) (19)	**UL** UL Compliant **CE** CE Compliant (20) **CEII** CE Compliant Class II Double Insulated (20)	**3FT** 3 ft (16) (21) **10FT** 10 ft **20FT** 20 ft **30FT** 30 ft **50FT** 50 ft **70FT** 70 ft **100FT** 100 ft	**BK** Black **WH** White (22)	**BAA** Buy America.n (22) (23)

Notes:

1. Consult factory for availability of static Royal Blue, Amber, 6500K and 90+ CRI.
2. Static colors made to order 8-10 weeks.
3. Not available for XN optic.
4. Factory installed, not interchangeable on site.
5. A dome lens accessory is available, order separately. For compatibility, a WFL optic must be specified for the fixture.
6. Consult factory for photometric performance.
7. Optical options are factory installed and cannot be changed in the field.
8. Field adjustable spread lens optical accessory available, order separately.
9. Not available with WFL, VWFL, NAS and WW optics.
10. Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.
11. Setup charges apply for RAL colors. Consult factory for details.
12. Longer lead times can be expected for custom RAL color finishes.
13. Lumentalk system is enabled with LDB accessory, DIM or DMX/RDM must be specified in the order code. See the typical wiring diagrams in the specification sheet for details.
14. A Lumentranslator 2 (LTL2) and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.
15. A control box (CBX) and LumenID (LID) must be specified.
16. Maximum of 3 ft cable length for daisy chain DMX applications with CBX-DS.
17. Consult factory for applications with 3GV requirements.
18. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.
19. Setup charges apply. Consult factory for details.
20. Consult European specification sheets and installation instructions for CE and CE Class II wiring information.
21. 3 ft cable length is standard unless otherwise specified.
22. Not available with CE or CEII certification options.
23. Contact your Lumenpulse Sales Representative for more information on order volume details.