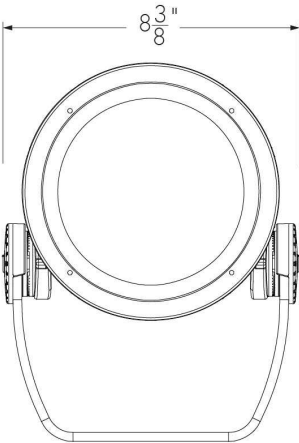
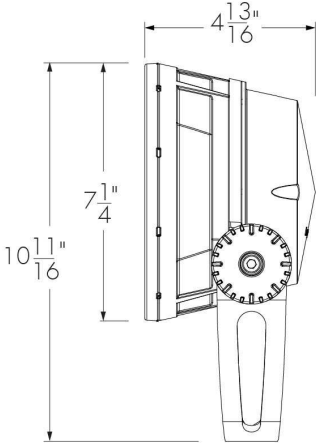


Project Name Bennett Bridge Qty 34

Type O2-E Catalog / Part Number LBM 120 MRGBWP NS DMX/RDM 3GV UL



Front View



Side View

Photometric Summary (Discrete RGBW40K)

| Symmetric  |                       |                     |
|------------|-----------------------|---------------------|
|            | Delivered output (lm) | Intensity (peak cd) |
| VN (6°)    | 1,572                 | 76,932              |
| NS (10°)   | 1,533                 | 54,810              |
| NF (20°)   | 1,411                 | 11,384              |
| M (30°)    | 1,356                 | 6,270               |
| FL (40°)   | 1,294                 | 3,500               |
| WFL (60°)  | 1,142                 | 892                 |
| Asymmetric |                       |                     |
| NAS        | 1,442                 | 23,041 (@2.5°)      |
| WW         | 1,290                 | 5,877 (@5°)         |

1. Based on RGBW40K full output.  
2. Photometric performance is measured in compliance with IESNA LM-79-24.  
3. Refer to the [Lumenbeam Color Changing Photometric Guide](#) on Lumenpulse website for information on other color temperatures.

Photometric Summary (Opticolor+ MRGBWP)

| Symmetric |                       |                     |
|-----------|-----------------------|---------------------|
|           | Delivered output (lm) | Intensity (peak cd) |
| NS (10°)  | 1,158                 | 22,488              |
| NF (20°)  | 1,090                 | 7,161               |
| M (30°)   | 1,070                 | 4,026               |
| FL (40°)  | 1,107                 | 2,959               |
| WFL (60°) | 1,089                 | 1,112               |
| VWFL(90°) | 972                   | 495                 |

1. Based on MRGBWP full output, white set to 3000K.  
2. Photometric performance is measured in compliance with IESNA LM-79-24.  
3. Refer to the [Lumenbeam Color Changing Photometric Guide](#) on Lumenpulse website for information on other color temperatures.

Description

The Lumenbeam Medium Color Changing is an IP66-rated luminaire for lighting landscapes, trees, columns, monuments, and architectural details. The system offers numerous options including optics for flood or accent lighting, a choice of color mixing, 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

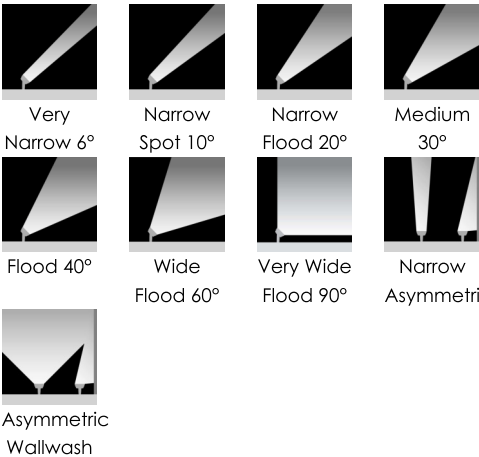
|                                            |                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Colors and Color Temperature (Discrete)    | <b>RGBA:</b> Discrete Red, Green Bue, Amber<br><b>RGBW30K:</b> Discrete Red, Green, Blue, White 30K<br><b>RGBW40K:</b> Discrete Red, Green, Blue, White 40K<br><b>RGB:</b> Discrete Red, Green, Blue                                                                                              |
| Colors and Color Temperature (Opticolor™)  | <b>MRGBA:</b> Opticolor™ Mix-at-Source Red, Green, Blue, PC Amber                                                                                                                                                                                                                                 |
| Colors and Color Temperature (Opticolor+™) | <b>MRGBWP:</b> Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 24K to 65K<br><b>MRGBWP Typical Color Rendering:</b><br>2700K-5000K: 90+ CRI<br>2500K-6500K: 80+ CRI<br><b>MRGRBWP:</b> Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 24K to 65K |
| Optics (Nominal Distribution)              | <b>VN:</b> VN (6°)<br><b>NS:</b> NS (10°)<br><b>NF:</b> NF (20°)<br><b>M:</b> M (30°)<br><b>FL:</b> FL (40°)<br><b>WFL:</b> WFL (60°)<br><b>VWFL:</b> VWFL (90°)<br><b>NAS:</b> NAS (Narrow Asymmetric)<br><b>WW:</b> WW (Asymmetric Wallwash)                                                    |
| Optical Option                             | <b>LSLH:</b> Linear Spread Lens Horizontal Distribution<br><b>LSLV:</b> Linear Spread Lens Vertical Distribution                                                                                                                                                                                  |

Photometric Summary (Opticolor MRGBA)

| Symmetric |                       |                     |
|-----------|-----------------------|---------------------|
|           | Delivered output (lm) | Intensity (peak cd) |
| NS (10°)  | 1,139                 | 22,105              |
| NF (20°)  | 1,071                 | 7,040               |
| M (30°)   | 1,052                 | 3,957               |
| FL (40°)  | 1,088                 | 2,908               |
| WFL (60°) | 1,070                 | 1,093               |
| VWFL(90°) | 955                   | 486                 |

1. Based on MRGBA full output.  
2. Photometric performance is measured in compliance with IESNA LM-79-24.  
3. Refer to the [Lumenbeam Color Changing Photometric Guide](#) on Lumenpulse website for information on other color temperatures.

Optic



|                   |                                                                                                                                                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Option            | <b>SY:</b> Short Yoke<br><b>SR Y:</b> Short Rotational Yoke<br><b>RY:</b> Rotational Yoke<br><b>3GV:</b> 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications<br><b>CRC:</b> Corrosion-Resistant Coating for Hostile Environments |
| Cable Color       | <b>BK:</b> Black<br><b>WH:</b> White                                                                                                                                                                                                       |
| Power Consumption | 28 W (RGB, RGBW30K, RGBW40K, RGBA), 25W (MRGBA, MRGBWP and MRGRBWP)                                                                                                                                                                        |
| Warranty          | 5-year limited warranty                                                                                                                                                                                                                    |

Performance

|                                          |                                                                                                                                                                                                                                                            |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Delivered Output (Discrete)      | 1,598 lm (RGB full output, VN 6°, DMX/RDM)<br>1,540 lm (RGBW30K full output, VN 6°, DMX/RDM)<br>1,572 lm (RGBW40K full output, VN 6°, DMX/RDM)<br>1,284 lm (RGBA full output, VN 6°, DMX/RDM)                                                              |
| Maximum Delivered Output (Opticolor)     | 1,139 lm (MRGBA full output, NS 10°, DMX/RDM)                                                                                                                                                                                                              |
| Maximum Delivered Output (Opticolor+)    | 1,158 lm (MRGBWP full output, NS 10°, DMX/RDM)                                                                                                                                                                                                             |
| Maximum Delivered Intensity (Discrete)   | 76,667 cd at nadir (RGB full output, VN 6°, DMX/RDM)<br>75,393 cd at nadir (RGBW30K full output, VN 6°, DMX/RDM)<br>76,932 cd at nadir (RGBW40K full output, VN 6°, DMX/RDM)<br>62,853 cd at nadir (RGBA full output, VN 6°, DMX/RDM)                      |
| Maximum Delivered Intensity (Opticolor)  | 22,105 cd at nadir (MRGBA full output, NS 10°, DMX/RDM)                                                                                                                                                                                                    |
| Maximum Delivered Intensity (Opticolor+) | 22,488 cd at nadir (MRGBWP full output, NS 10°, DMX/RDM)                                                                                                                                                                                                   |
| Illuminance at Distance (Discrete)       | Minimum 1 fc at 276 ft (RGBW30K full output, VN 6°, DMX/RDM)<br>Minimum 1 fc at 279 ft (RGBW40K full output, VN 6°, DMX/RDM)<br>Minimum 1 fc at 252 ft (RGBA full output, VN 6°, DMX/RDM)                                                                  |
| Illuminance at Distance (Opticolor)      | Minimum 1 fc at 149 ft (MRGBA full output, NS 10°, DMX/RDM)                                                                                                                                                                                                |
| Illuminance at Distance (Opticolor+)     | Minimum 1 fc at 150 ft (MRGBWP full output, NS 10°, DMX/RDM)                                                                                                                                                                                               |
| Lumen Maintenance                        | L70 (15K) > 90,000 hrs Ta 25 °C (TM-21 reported)<br>L70 > 150,000 hrs Ta 25 °C (projected)*<br>L90 (15K) = 55,400 hrs Ta 25 °C (TM-21 reported)<br>L90 = 55,400 hrs Ta 25 °C (projected)*<br>*Estimated based on in-situ case temperature and LM-80 report |

Physical

|                    |                                                    |
|--------------------|----------------------------------------------------|
| Housing Material   | Low copper content high pressure die-cast aluminum |
| Yoke Material      | Heavy aluminum (standard yoke included)            |
| Lens Material      | Clear tempered glass                               |
| Dome Lens Material | Acrylic                                            |

Color and Color Temperature



**opticolor+™**  
Opticolor+™  
Mix-at-Source  
Red, Green,  
Blue Plus White  
Settable  
Range 24K to  
65K



**opticolor™**  
Opticolor™  
Mix-at-Source  
Red, Green,  
Blue, PC  
Amber



**RGBA**  
Red Green Blue Amber  
Discrete Red,  
Green Bue,  
Amber



**RGBW**  
Red Green Blue White  
Discrete Red,  
Green, Blue,  
White 30K



**RGBW**  
Red Green Blue White  
Discrete Red,  
Green, Blue,  
White 40K



**RGB**  
Red Green Blue  
Discrete Red,  
Green, Blue



**opticolor+™**  
Opticolor+™  
Mix-at-Source  
Red, Green,  
Royal Blue Plus  
White Settable  
Range 24K to  
65K

Control



DMX/RDM



Ratings

IP66    IK09

Certifications





|                                       |                                                                                                                                                                                                                                                                         |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                                                                                                       |
| <b>Electrical and Control</b>         |                                                                                                                                                                                                                                                                         |
| Voltage                               | 100 to 277 volts                                                                                                                                                                                                                                                        |
| Fixture Cable                         | Power and data in one cable                                                                                                                                                                                                                                             |
| Conductors                            | 3C #16-3 (LT control for MRGBA, MRGBWP and MRGRBWP)<br>6C #14-3/ #24-3 (DMX/RDM control)<br>5C #16-5 (DALI8 control)                                                                                                                                                    |
| Control                               | DMX/RDM Enabled, DALI 2 T8 Enabled Dimming 0.1%,<br>Lumentalk system is enabled with LDB accessory - see typical<br>wiring diagrams for details                                                                                                                         |
| Resolution (DMX/RDM)                  | Per fixture, 8-bit or 16-bit, 3 channels (RGB) or 4 channels<br>(RGBW30K, RGBW40K, RGBA, MRGBA, MRGBWP and<br>MRGRBWP)                                                                                                                                                  |
| <b>Environmental</b>                  |                                                                                                                                                                                                                                                                         |
| Storage Temperature                   | -40 °F to 158 °F (device must reach start-up temperature<br>value before operating)                                                                                                                                                                                     |
| Start-up Temperature                  | -13 °F to 122 °F                                                                                                                                                                                                                                                        |
| Operating Temperature                 | -40 °F to 122 °F                                                                                                                                                                                                                                                        |
| Ingress Protection Rating             | IP66<br>Wet location rated                                                                                                                                                                                                                                              |
| Impact Resistance Rating              | IK09                                                                                                                                                                                                                                                                    |
| Application Wind Speed                | Luminaires were designed based on AASHTO 2013 standard to<br>ensure highest quality and safety. Installation should be<br>validated by a local project engineer to ensure the luminaires<br>are suitable for the wind speed and exposure of the specific<br>application |
| <b>Accessories (Order Separately)</b> |                                                                                                                                                                                                                                                                         |
| Optical Accessories                   | Lumenbeam Medium Snoot, Lumenbeam Medium Snoot<br>Wide, Lumenbeam Medium Visor, Lumenbeam Medium Linear<br>Spread Lens Adjustable, Lumenbeam Medium Wire Guard,<br>Lumenbeam Medium Dome Lens                                                                           |
| Control Boxes                         | DMX/RDM enabled (Daisy Chain or Star Configuration),<br>Ethernet enabled (Daisy Chain or Star Configuration),<br>Lumentalk Data Bridge                                                                                                                                  |
| Control Systems                       | Pharos® Designer Lighting Control Kit (PHAROS), Pharos® Expert<br>Control Kit (EXPERT)                                                                                                                                                                                  |
| Diagnostic and Addressing Tools       | LumenID (LID)                                                                                                                                                                                                                                                           |

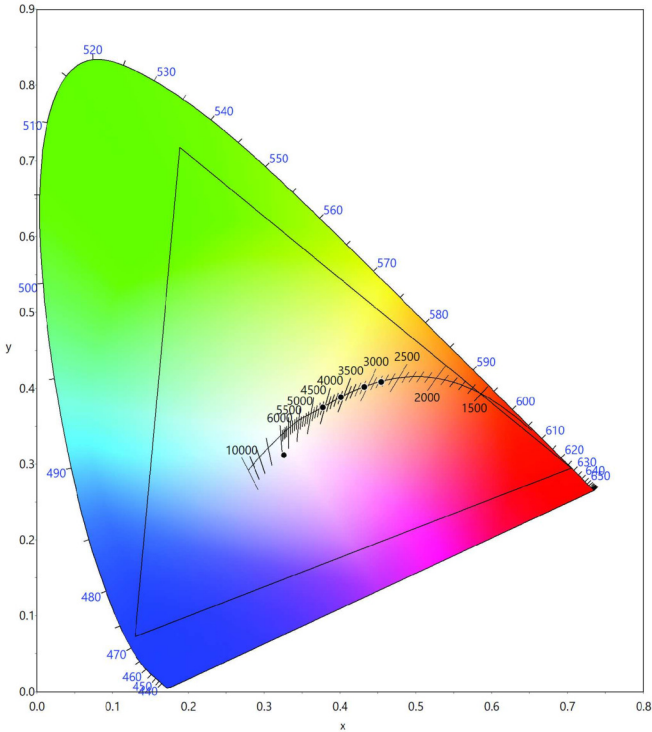
Important

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.

Color Point Information

MRGBWP



Dominant Wavelength and Chromaticity

|       | Dominant Wavelength | Chromaticity |        |
|-------|---------------------|--------------|--------|
|       |                     | Cx           | Cy     |
| Red   | ~628nm              | 0.7050       | 0.2949 |
| Green | ~531nm              | 0.1885       | 0.7178 |
| Blue  | ~471nm              | 0.1298       | 0.0726 |
| Amber | ~591nm              | 0.5755       | 0.4126 |

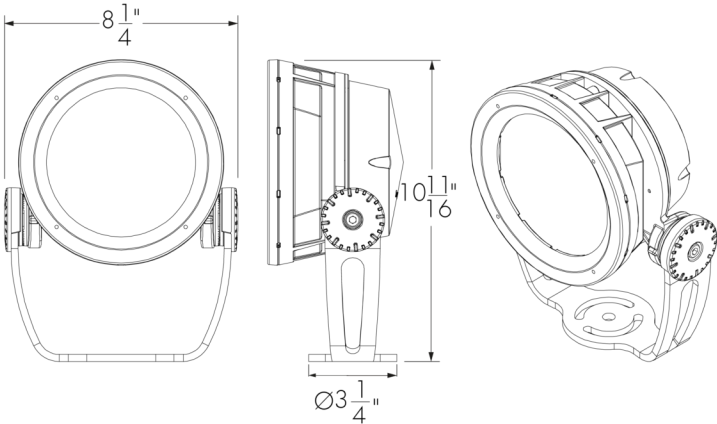
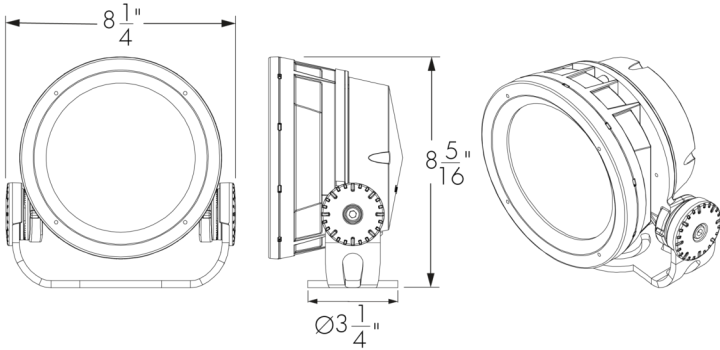
|                | Cx     | Cy     |
|----------------|--------|--------|
| MRGBWP Full On | 0.3261 | 0.3121 |
| 27K Optidrive  | 0.4545 | 0.4081 |
| 30K Optidrive  | 0.4318 | 0.4017 |
| 35K Optidrive  | 0.4010 | 0.3883 |
| 40K Optidrive  | 0.3773 | 0.3747 |

Values measured from Steady State Full on Optidrive @ 25°C ambient conditions.

Mounting Options

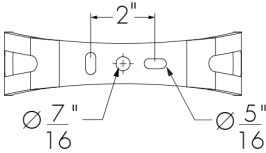
SRY - Short Rotational Yoke

RY - Rotational Yoke



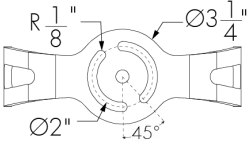
Mounting Details

Mounting Hole Pattern - Standard And Short Yoke



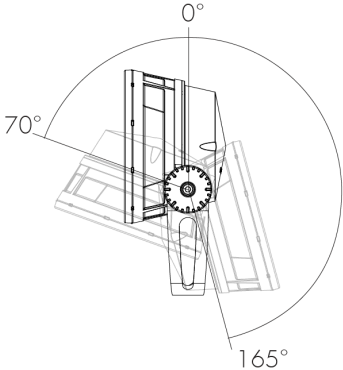
3 bolts are required for wind and vibration resistance, provided by others.

Mounting Hole Pattern - Rotational Yoke



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

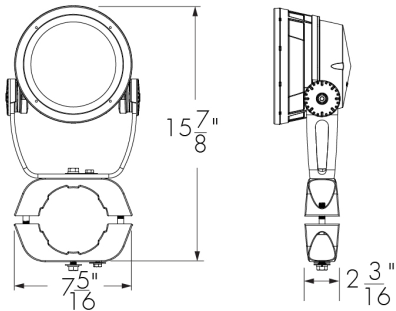
Adjustable Pivot Limits



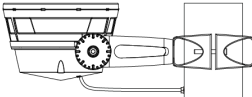
Standard Yoke

Mounting Accessories (Order Separately)

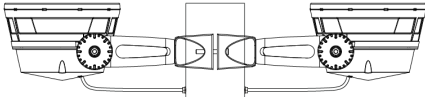
Round Pole Mounting Accessory



PM4 model shown.  
Consult factory for square pole section.



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

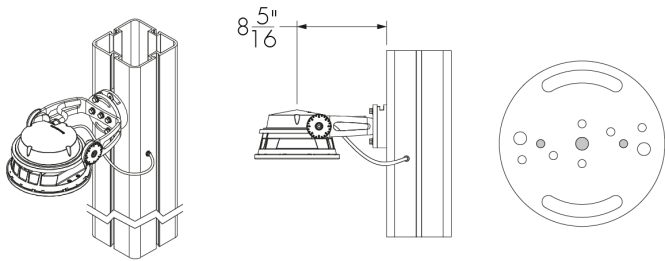


**PM4-2, PM4.5-2, PM5-2** - Round pole mounting accessory - twin fixtures  
\*One bracket assembly is supplied per 2 fixtures unless otherwise specified.

|            | PM4       | PM4.5       | PM5       |
|------------|-----------|-------------|-----------|
| For pole Ø | 4" ± 1/16 | 4.5" ± 1/16 | 5" ± 1/16 |

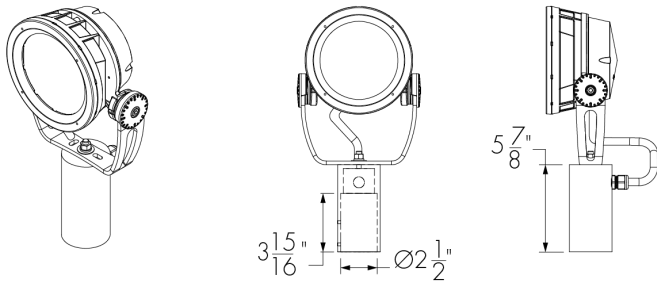
Consult factory for other pole diameters.

PLTU - Universal Yoke



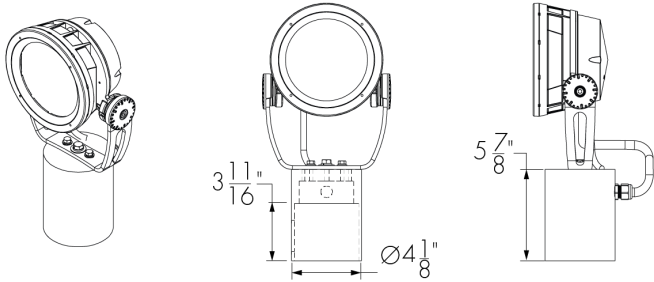
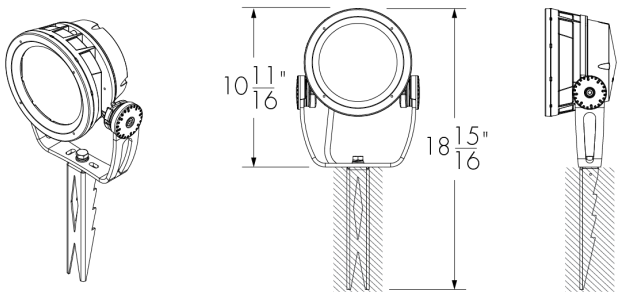
Refer to the Universal Yoke specification sheet and Pole installation instructions for more details. Square Lumentech profile shown. The mounting holes used for this fixture are shown in gray.

Tenon Adapter



**TN2** - Tenon adapter to fit on 2 3/8 in O.D. tenon  
Vertical mounting only. Consult factory for horizontal mounting.

SK - Stake Mounting

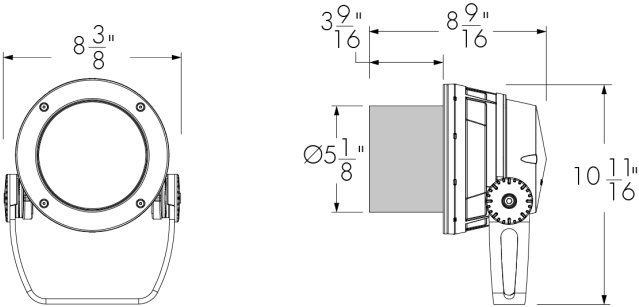


**TN4** - Tenon adpater to fit on 4 in O.D. tenon  
Vertical mounting only. Consult factory for horizontal mounting.

Optical Accessories (Order Separately)

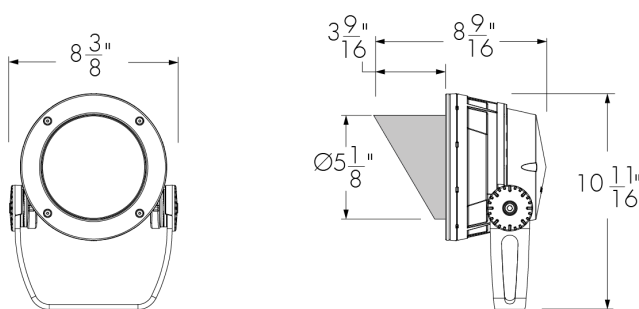
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.

SN - Snoot



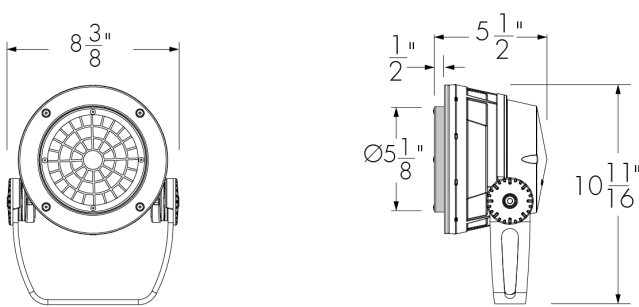
LBMSN-FINISH-BK-OPTIONS (CRC)  
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

VS - Visor



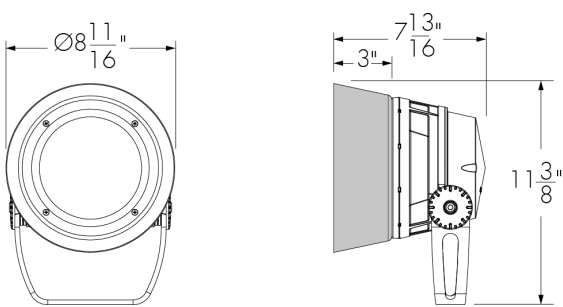
LBMVS-FINISH-BK-OPTIONS (CRC)  
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

WG - Wire Guard



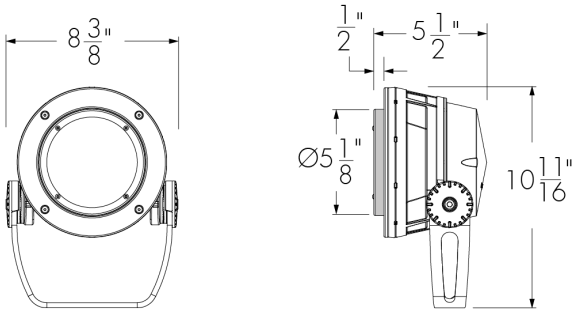
LBMWG-FINISH-OPTIONS (CRC)  
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

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.

LSLA - Linear Spread Lens Adjustable



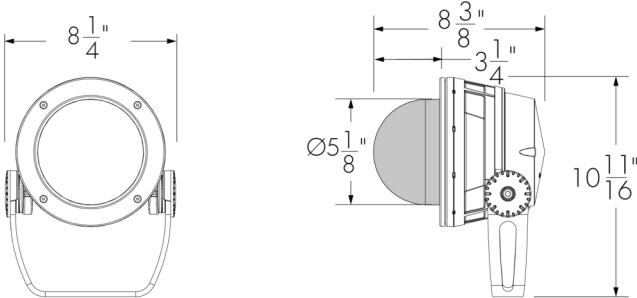
LBMLSLA-FINISH-OPTIONS (CRC)  
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

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.

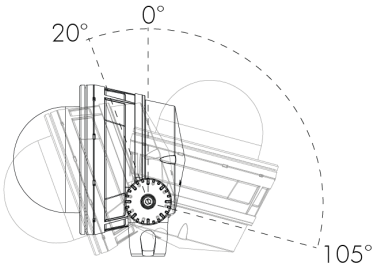
DM - Dome Lens



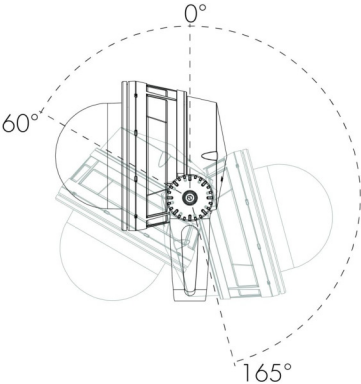
LBMDM-FINISH-OPTIONS (CRC)

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



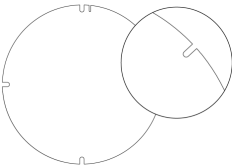
Dome Lens is available with WFL Optic only. The WFL optic must be specified for the fixture.

Dome Lens cannot be combined with other optical accessories.

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

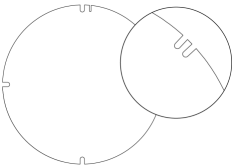
Diffuser Lenses (Intended for Mockup Purposes Only, Order Separately)

Diffuser Lens 1 (1 Notch)



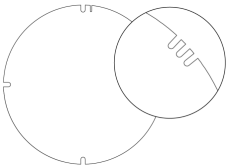
147671

Diffuser Lens 2 (2 Notches)



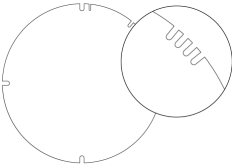
147672

Diffuser Lens 3 (3 Notches)



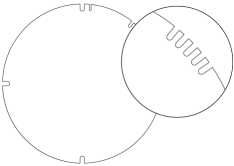
147673

Diffuser Lens 4 (4 Notches)



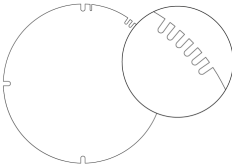
147674

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<br>1 Notch             | Diffuser Lens 2<br>2 Notches | Diffuser Lens 3<br>3 Notches | Diffuser Lens 4<br>4 Notches | Diffuser Lens 5<br>5 Notches | Diffuser Lens 6<br>6 Notches |
| XN (4°/5°)                       | VN                                     | NS                           | NF                           | M                            | FL                           | WFL                          |
| VN (6°)                          | NS                                     |                              |                              |                              |                              |                              |
| NS (10°)                         |                                        |                              |                              |                              |                              |                              |
| NF (20°)                         |                                        |                              |                              |                              |                              |                              |
| M (30°)                          |                                        |                              |                              | FL                           | WFL                          |                              |
| FL (40°)                         |                                        |                              |                              |                              |                              |                              |
| WFL (60°)                        |                                        |                              |                              |                              | VWFL                         |                              |
| VWFL (90°)                       |                                        |                              |                              |                              |                              |                              |

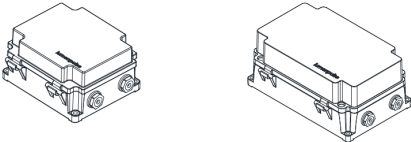
Choose a diffuser lens based on the desired final beam distribution. Refer to the 6-digit part numbers above to order diffuser lenses individually. To order a complete set of 6 diffuser lenses in a bag, refer to the following item names: **LBS**: LBALK-S **LBM/LBMP**: LBALK-M **LBL/LBLP**: LBALK-L **LBG/LBGP**: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

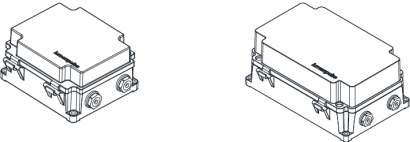
Control Boxes (Order Separately)

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.

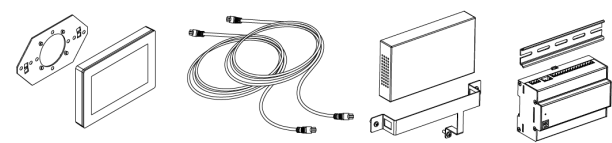
CBX-ENET - Ethernet Enabled (Daisy Chain or Star Configuration)



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.

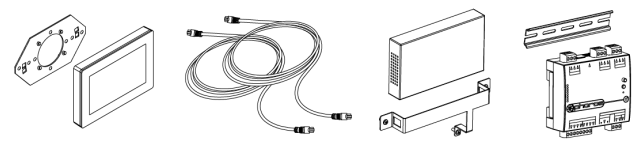
Control Systems (Order Separately)

PHAROS - Pharos® Designer Lighting Control Kit



The Pharos Designer Lighting Control 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)

EPA Guide

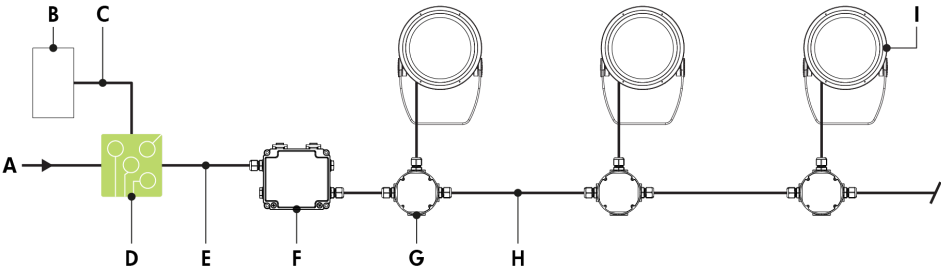
|                   | LBM                                                                               | LBM with Snoot                                                                    | LBM with Visor                                                                    | LBM with Snoot Wide                                                                 | 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                                                                               | 0.214                                                                               |

Typical Wiring Diagrams

Wiring Color Code

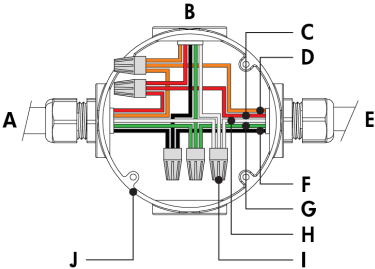
| UL Color Code | USE                          |
|---------------|------------------------------|
| Green         | Ground                       |
| Black         | Line                         |
| White         | Line/Neutral                 |
| Red or Purple | 0-10V / Data +               |
| Orange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

Lumentalk (LT) RGB-RGBW30K-RGBW40K-RGBA



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

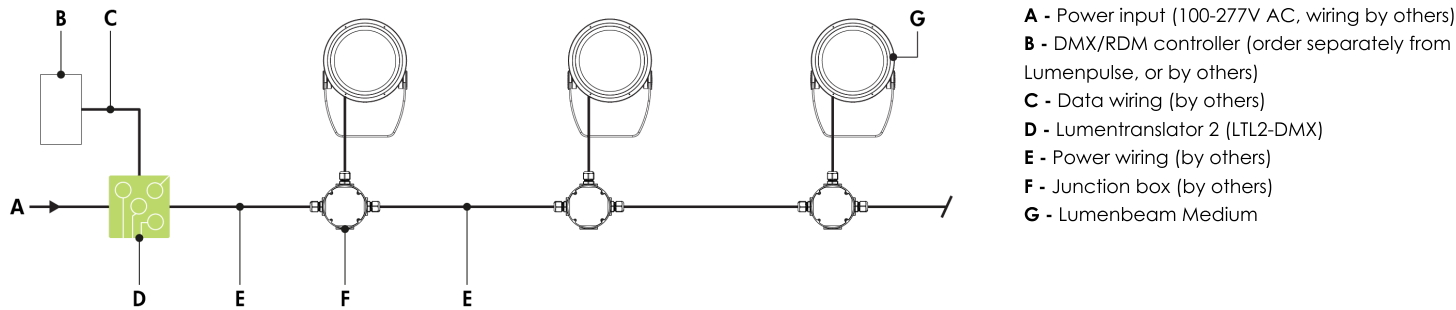
Lumentalk (LT) - Wiring Detail Using LDB



- 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. Fixtures must be specified as DMX/RDM and the 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. Consult factory for details.
- Maximum of 32 fixtures per LDB-DMX. Consult factory for details.
- 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.
- 28 watts per fixture (RGB, RGBW30K, RGBW40K, RGBA).

Lumentalk (LT) MRGBA-MRGBWP-MRGRBWP

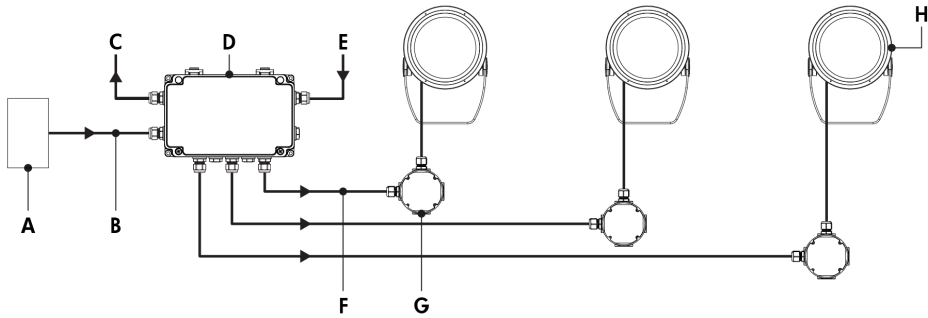


Lumentalk (LT) - Wiring Detail



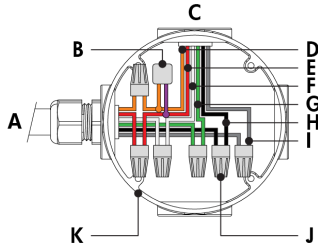
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk enabled fixtures must be commissioned using LumentalkID software and a LID. Consult factory for details.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- 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.
- 25 watts per fixture (MRGBA, MRGBWP and MRGRBWP).

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)

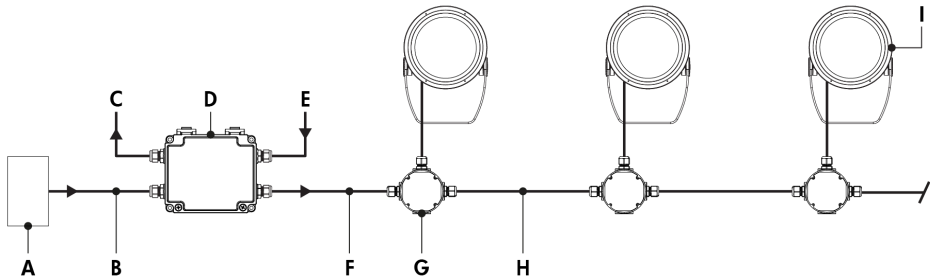
Maximum Fixture Count Per Run

| 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.

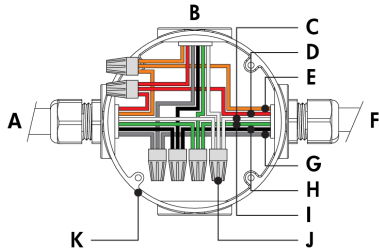
- Consult CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST.
- RGB color mixture option requires 3 DMX addresses. RGBW30K, RGBW40K, RGBA, MRGBA, MRGBWP and MRGRBWP color mixture options require 4 DMX addresses.
- 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.
- 28 watts per fixture (RGB, RGBW30K, RGBW40K, RGBA), 25 watts per fixture (MRGBA, MRGBWP and MRGRBWP).

Daisy Chain Layout (DMX/RDM)



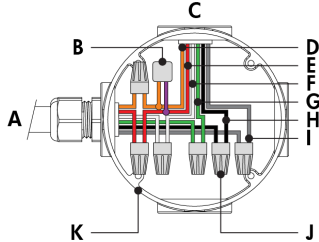
- A - DMX/RDM controller (order separately from Lumenpulse, or by others)
- B - Data input (Belden 9841 or equivalent, by others)
- C - Data output to next CBX (optional, not isolated/not boosted)
- D - CBX-DS
- E - Power input (100-277V AC, wiring by others)
- F - Power and data output to fixture (wiring 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.
- RGB color mixture option requires 3 DMX addresses. RGBW30K, RGBW40K, RGBA, MRGBA, MRGBWP and MRGRBWP color mixture options require 4 DMX addresses.
- 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.
- 28 watts per fixture (RGB, RGBW30K, RGBW40K, RGBA), 25 watts per fixture (MRGBA, MRGBWP and MRGRBWP).

How to Order

| LBM                                | 120                                                                                                                                                            | MRGBWP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NS                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                        | Unselected                                                                                                                                                                                                                                                                                                                                                                                                         | DMX/RDM                                                                                                                                                                       | 3GV                                                                                                                                                                                                                                                                             | UL                                                                                                                                                | Unselected                                                                                                                                                                     | Unselected                                    |                                             |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------|
| Housing                            | Voltage                                                                                                                                                        | Color and Color Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Optic                                                                                                                                                                                                                                                                                                                                                                                           | Optical Option<br>(14) (16) (17)                                                                                                                       | Finish                                                                                                                                                                                                                                                                                                                                                                                                             | Control (21) (22)                                                                                                                                                             | Option                                                                                                                                                                                                                                                                          | Certification                                                                                                                                     | Cable Length<br>(25) (31)                                                                                                                                                      | Cable Color                                   | Buy America.n<br>Act                        |
| <b>LBM</b><br>Lumenbeam™<br>Medium | <b>100</b><br>100 Volts<br><b>120</b><br>120 Volts<br><b>208</b><br>208 Volts<br><b>220</b><br>220 Volts<br><b>240</b><br>240 Volts<br><b>277</b><br>277 Volts | <b>MRGBWP</b><br>Opticolor+™<br>Mix-at-<br>Source Red,<br>Green, Blue<br>Plus White<br>Settable<br>Range 24K to<br>65K (1) (2) (3) (4) (5)<br><b>MRGBA</b><br>Opticolor™<br>Mix-at-<br>Source Red,<br>Green, Blue,<br>PC Amber (1) (6)<br><b>RGBA</b><br>Discrete Red,<br>Green Bue,<br>Amber<br><b>RGBW30K</b><br>Discrete Red,<br>Green, Blue<br>White 30K (4)<br><b>RGBW40K</b><br>Discrete Red,<br>Green, Blue,<br>White 40K (4)<br><b>RGB</b><br>Discrete Red,<br>Green, Blue<br><b>MRGRBWP</b><br>Opticolor+™<br>Mix-at-<br>Source Red,<br>Green, Royal<br>Blue Plus<br>White<br>Settable<br>Range 24K to<br>65K (1) (3) (4) (5) (7) (8) (9) | <b>VN</b><br>Very Narrow<br>6° (10) (11)<br><b>NS</b><br>Narrow Spot<br>10° (10)<br><b>NF</b><br>Narrow Flood<br>20° (10)<br><b>M</b><br>Medium 30°<br>(10)<br><b>FL</b><br>Flood 40° (10)<br><b>WFL</b><br>Wide Flood<br>60° (10) (12)<br><b>VWFL</b><br>Very Wide<br>Flood 90° (10) (13)<br><b>NAS</b><br>Narrow<br>Asymmetric<br>(10) (11)<br><b>WW</b><br>Asymmetric,<br>Wallwash (10) (11) | <b>LSLH</b><br>Linear<br>Spread Lens<br>Horizontal<br>Distribution<br>(15)<br><b>LSLV</b><br>Linear<br>Spread Lens<br>Vertical<br>Distribution<br>(15) | <b>BK</b><br>Black<br>Sandtex®<br><b>BRZ</b><br>Bronze<br>Sandtex®<br><b>SI</b><br>Silver<br>Sandtex®<br><b>WH</b><br>Smooth<br>White<br><b>BKTX</b><br>Textured<br>Black<br><b>BRZTX</b><br>Textured<br>Bronze Non-<br>Metallic<br><b>GRATX</b><br>Textured<br>Medium<br>Gray<br><b>GRNTX</b><br>Textured<br>Green<br><b>WHTX</b><br>Textured<br>White<br><b>CC</b><br>Custom<br>Color & Finish<br>(18) (19) (20) | <b>LT</b><br>Lumentalk (13)<br>(22) (23)<br><b>DMX/RDM</b><br>DMX/RDM<br>Enabled<br>Dimming (24)<br>(25)<br><b>DALIT8</b><br>DALI 2 T8<br>Enabled<br>Dimming<br>0.1% (5) (26) | <b>SY</b><br>Short Yoke<br><b>SR</b><br>Short<br>Rotational<br>Yoke (27)<br><b>RY</b><br>Rotational<br>Yoke (27)<br><b>3GV</b><br>3G ANSI<br>C136.31-2010<br>Vibration<br>Rating for<br>Bridge<br>Applications<br><b>CRC</b><br>Corrosion-<br>Resistant<br>Coating (28)<br>(29) | <b>UL</b><br>UL<br>UL Compliant<br><b>CE</b><br>CE<br>Compliant<br>(30)<br><b>CEII</b><br>CE<br>Compliant<br>Class II<br>Double<br>Insulated (30) | <b>3FT</b><br>3 ft (25) (31)<br><b>10FT</b><br>10 ft<br><b>20FT</b><br>20 ft<br><b>30FT</b><br>30 ft<br><b>50FT</b><br>50 ft<br><b>70FT</b><br>70 ft<br><b>100FT</b><br>100 ft | <b>BK</b><br>Black<br><b>WH</b><br>White (32) | <b>BAA</b><br>Buy<br>America.n (32)<br>(33) |

Notes:

1. Not available for VN, NAS and WW optics.

2. Consult factory for the availability of more color and CCT options (e.g. royal blue).

3. MRGBWP and MRGRBWP can be configured to MRGB via RDM, consult factory for more details.

4. Fixtures are shipped from the factory in Optidrive™ Mode. Normal Mode can be activated onsite for DMX/RDM and LT fixtures. For DMX/RDM applications, Optidrive Mode requires a LumenID, LumenID software and onsite commissioning. For LT applications, Optidrive Mode requires a LumenID, LumentalkID software and onsite commissioning. Additionally, with Opticolor+™ the white CCT is configurable in the field from 2200K-8000K.

5. Consult factory for DALI T8 applications with MRGBWP or MRGRBWP and a CCT other than 3000K.

6. Consult factory for availability of other color options such as Royal Blue.

7. Longer lead time of 10-12 weeks.

8. Consult factory for the availability of more color and CCT options.

9. Consult factory for photometric performance.

10. Factory installed; not interchangeable on site.

11. Not available with MRGBA, MRGBWP and MRGRBWP color temperature options.

12. A dome lens accessory is available, order separately. For compatibility, a WFL optic must be specified for the fixture.

13. Available with MRGBA, MRGBWP and MRGRBWP color temperature options only.

14. Optical options are factory installed and cannot be changed in the field.

15. Field adjustable spread lens optical accessory available, order separately.

16. Not available with WFL, NAS and WW optics when combined with RGB color temperature option.

17. Not available with VN, WFL, VWFL, NAS and WW optics when combined with MRGBA, MRGBWP or MRGRBWP color temperature options.
18. 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.

19. Setup charges apply for RAL colors. Consult factory for details.

20. Longer lead times can be expected for custom RAL color finishes.

21. For RGB, RGBW30K, RGBW40K and RGBA applications, a Lumentalk system is enabled with LDB-DMX accessory, DMX/RDM must be specified in the order code. See the typical wiring diagrams in the specification sheet for details.

22. A Lumentranslator 2 (LTL2) and LumenID (LID) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.

23. Not available with CEII certification option.

24. A control box (CBX) and LumenID (LID) must be specified.

25. Maximum of 3 ft cable length for daisy chain DMX applications with CBX-DS.

26. DALI 2 T8 controller required, provided by others. DALI 2 T8 control uses a single DALI short address.

27. Consult factory for applications with 3GV requirements.

28. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.

29. Setup charges apply. Consult factory for details.

30. Consult European specification sheets and installation instructions for CE and CE Class II wiring information.

31. 3 ft cable length is standard unless otherwise specified.

32. Not available with CE or CEII certification options.

33. Contact your Lumenpulse Sales Representative for more information on order volume details.