

Project Name

Bennett Bridge

Type

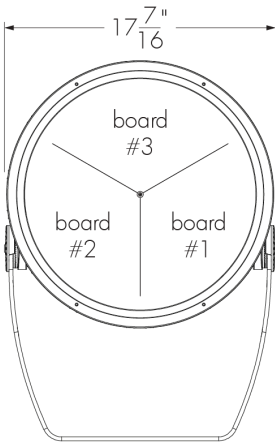
O1-F

Catalog / Part Number

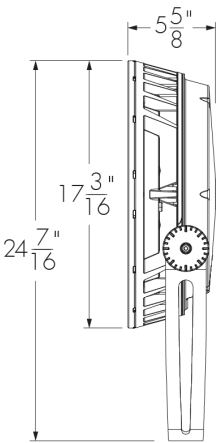
LBX RO 120 MRGBWP NS NS NS DMX/RDM 3GV UL

Qty

24



Front view



Side view

Photometric Summary (Discrete HO RGBW40K)

Symmetric		
	Delivered output (lm)	Intensity (peak cd)
XN (3°)	9,712	948,870
VN (6°)	10,507	610,676
NS (10°)	10,567	363,527
NF (20°)	9,418	78,396
M (30°)	8,932	40,371
FL (40°)	8,558	22,744
WFL (60°)	8,609	8,936
Asymmetric		
NAS	7,745	114,798 (@2.5°)
WW	8,583	39,444 (@5°)

1. Based on HO 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+ RO MRGBWP)

Symmetric		
	Delivered output (lm)	Intensity (peak cd)
NS (10°)	8,093	133,173
NF (20°)	6,998	44,359
M (30°)	6,896	25,055
FL (40°)	7,087	18,982
WFL (60°)	6,736	6,795
VWFL(90°)	6,307	3,212

1. Based on RO 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 XLarge Color Changing is an IP66-rated luminaire for lighting landscapes, trees, columns, monuments, and architectural details. The system offers numerous options including two outputs (RO and HO), 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

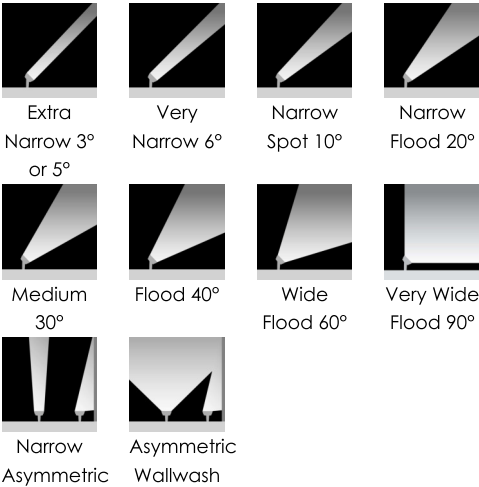
Colors and Color Temperature (Discrete)	RGBA: Discrete Red, Green Bue, Amber
	RGBW30K: Discrete Red, Green, Blue, White 30K
	RGBW40K: Discrete Red, Green, Blue, White 40K
Colors and Color Temperature (Opticolor+™)	RGB: Discrete Red, Green, Blue
	MRGBA: Opticolor™ Mix-at-Source Red, Green, Blue, PC Amber
	MRGBWP: Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 24K to 65K
Colors and Color Temperature (Opticolor+™)	MRGBWP Typical Color Rendering: 2700K-5000K: 90+ CRI 2500K-6500K: 80+ CRI
	MRGRBWP: Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 24K to 65K
Optics (Nominal Distribution)	XN: XN (3° or 5°)
	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)

Photometric Summary (Opticolor RO MRGBA)

Symmetric		
	Delivered output (lm)	Intensity (peak cd)
NS (10°)	7,745	127,447
NF (20°)	6,697	42,451
M (30°)	6,599	23,978
FL (40°)	6,782	18,166
WFL (60°)	6,447	6,503
VWFL(90°)	6,035	3,074

1. Based on RO 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



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	140 W (RO RGB, RO RGBW30K and RGBW40K versions) 145 W (RO MRGBA, RO MRGBWP and RO MRGRBWP versions) 205 W (HO RGB, HO RGBW30K, HO RGBW40K and HO RGBA versions)
Warranty	5-year limited warranty
Performance	
Maximum Delivered Output (Discrete)	7,765 lm (RO RGB full output, XN 5°, DMX/RDM) 7,424 lm (RO RGBW30K full output, XN 3°, DMX/RDM) 7,575 lm (RO RGBW40K full output, XN 3°, DMX/RDM) 6,189 lm (RO RGBA full output, NS XN 3°, DMX/RDM) 9,955 lm (HO RGB full output, XN 5°, DMX/RDM) 10,355 lm (HO RGBW30K full output, NS 10°, DMX/RDM) 10,567 lm (HO RGBW40K full output, NS 10°, DMX/RDM) 8,633 lm (HO RGBA full output, NS 10°, DMX/RDM)
Maximum Delivered Output (Opticolor)	7,745 lm (RO MRGBA full output, NS 10°, DMX/RDM)
Maximum Delivered Output (Opticolor+)	8,093 lm (RO MRGBWP full output, NS 10°, DMX/RDM)
Maximum Delivered Intensity (Discrete)	460,073 cd at nadir (RO RGB full output, XN 5°, DMX/RDM) 725,316 cd at nadir (RO RGBW30K full output, XN 3°, DMX/RDM) 740,119 cd at nadir (RO RGBW40K full output, XN 3°, DMX/RDM) 604,677 cd at nadir (RO RGBA full output, XN 3°, DMX/RDM) 589,837 cd at nadir (HO RGB full output, XN 5°, DMX/RDM) 929,893 cd at nadir (HO RGBW30K full output, XN 3°, DMX/RDM) 948,870 cd at nadir (HO RGBW40K full output, XN 3°, DMX/RDM) 775,227 cd at nadir (HO RGBA full output, XN 3°, DMX/RDM)
Maximum Delivered Intensity (Opticolor)	127,447 cd at nadir (RO MRGBA full output, NS 10°, DMX/RDM)
Maximum Delivered Intensity (Opticolor+)	133,173 cd at nadir (RO MRGBWP full output, NS 10°, DMX/RDM)

Color and Color Temperature



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



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

Control






DMX/RDM





Ratings

IP66 IK09

Certifications





Illuminance at Distance (Discrete)

Minimum 1 fc at 681 ft (RO RGB full output, XN 5°, DMX/RDM)
Minimum 1 fc at 855 ft (RO RGBW30K full output, XN 3°, DMX/RDM)
Minimum 1 fc at 864 ft (RO RGBW40K full output, XN 3°, DMX/RDM)
Minimum 1 fc at 781 ft (RO RGBA full output, XN 3°, DMX/RDM)
Minimum 1 fc at 771 ft (HO RGB full output, XN 5°, DMX/RDM)
Minimum 1 fc at 968 ft (HO RGBW30K full output, XN 3°, DMX/RDM)
Minimum 1 fc at 978 ft (HO RGBW40K full output, XN 3°, DMX/RDM)
Minimum 1 fc at 884 ft (HO RGBA full output, XN 3°, DMX/RDM)

Illuminance at Distance (Opticolor)

Minimum 1 fc at 357 ft (RO MRGBA full output, NS 10°, DMX/RDM)

Illuminance at Distance (Opticolor+)

Minimum 1 fc at 365 ft (RO MRGBWP full output, NS 10°, DMX/RDM)

Lumen Maintenance

L70 (15K) > 90,000 hrs Ta 25 °C (TM-21 reported)
L70 > 150,000 hrs Ta 25 °C (projected)*
L90 (15K) = 55,400 hrs Ta 25 °C (TM-21 reported)
L90 = 55,400 hrs Ta 25 °C (projected)*
*Estimated based on in-situ case temperature and LM-80 report

Physical

Housing Material	Low copper content high pressure die-cast aluminum
Yoke Material	Steel (standard yoke included)
Lens Material	Clear tempered glass
Dome Lens Material	Acrylic
Hardware Material	Stainless steel
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	38 lbs
EPA	Front = 1.93 ft², Side = 0.45 ft²

Electrical and Control

Voltage	100 to 277 volts
Fixture Cable	Power and data in one cable
Conductors	3C #16-3 (LT control) 6C #14-3/ #24-3 (DMX/RDM control) 5C #16-5 (DALIT8 control)
Control	Lumentalk, DMX/RDM Enabled, DALI 2 T8 Enabled Dimming 0.1%

Resolution (DMX/RDM)	Per board or fixture (configured with LumenID V3 software), 8-bit or 16-bit, 3 channels (RGB) or 4 channels (RGBW30K, RGBW40K, RGBA, MRGBA, MRGBWP and MRGRBWP)
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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 LBX Snoot, Lumenbeam LBX Snoot Wide, Lumenbeam LBX Visor, Lumenbeam LBX Linear Spread Lens Adjustable, Lumenbeam LBX Wire Guard, Lumenbeam LBX Dome Lens
Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration)
Control Systems	Pharos® Designer Lighting Control Kit (PHAROS), Pharos® Expert Control Kit (EXPERT)
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.

How to Order

LBX RO	120	MRGBWP	NS	NS	NS		Unselected	DMX/RDM	3GV
Housing	Voltage	Color and Color Temperature	Optic1	Optic2	Optic3	Optical Option (18) (20)	Finish	Control	Option
<div><div>LBX RO</div><div>Lumenbeam™ XLarge, Regular Output, 140-145W</div><div>LBX HO</div><div>Lumenbeam™ XLarge, High Output, 205W (1)</div></div>	<div>100</div> <div>100 Volts</div> <div>120</div> <div>120 Volts</div> <div>208</div> <div>208 Volts</div> <div>220</div> <div>220 Volts</div> <div>240</div> <div>240 Volts</div> <div>277</div> <div>277 Volts</div>	<div>MRGBWP</div> <div>Opticolor+™ Mix-at-Source Red, Green, Blue Plus White Settable Range 24K to 65K (2) (3) (4) (5) (6)</div> <div>MRGBA</div> <div>Opticolor™ Mix-at-Source Red, Green, Blue, PC Amber (7) (8)</div> <div>RGBA</div> <div>Discrete Red, Green Bue, Amber</div> <div>RGBW30K</div> <div>Discrete Red, Green, Blue, White 30K (8)</div> <div>RGBW40K</div> <div>Discrete Red, Green, Blue, White 40K (8)</div> <div>RGB</div> <div>Discrete Red, Green, Blue</div> <div>MRGRBWP</div> <div>Opticolor+™ Mix-at-Source Red, Green, Royal Blue Plus White Settable Range 24K to 65K (2) (3) (4) (5) (6) (9) (10)</div>	<div>XN</div> <div>Extra Narrow 3° or 5° (1) (11) (12)</div> <div>VN</div> <div>Very Narrow 6° (1) (12)</div> <div>NS</div> <div>Narrow Spot 10° (12)</div> <div>NF</div> <div>Narrow Flood 20° (12)</div> <div>M</div> <div>Medium 30° (12) (13)</div> <div>FL</div> <div>Flood 40° (12)</div> <div>WFL</div> <div>Wide Flood 60° (12) (14) (15)</div> <div>VWFL</div> <div>Very Wide Flood 90° (12) (14) (16) (17)</div> <div>NAS</div> <div>Narrow Asymmetric (1) (12)</div> <div>WW</div> <div>Asymmetric Wallwash (1) (12)</div>	<div>XN</div> <div>Extra Narrow 3° or 5° (1) (11) (12)</div> <div>VN</div> <div>Very Narrow 6° (1) (12)</div> <div>NS</div> <div>Narrow Spot 10° (12)</div> <div>NF</div> <div>Narrow Flood 20° (12)</div> <div>M</div> <div>Medium 30° (12) (13)</div> <div>FL</div> <div>Flood 40° (12)</div> <div>WFL</div> <div>Wide Flood 60° (12) (14) (15)</div> <div>VWFL</div> <div>Very Wide Flood 90° (12) (14) (16) (17)</div> <div>NAS</div> <div>Narrow Asymmetric (1) (12)</div> <div>WW</div> <div>Asymmetric Wallwash (1) (12)</div>	<div>XN</div> <div>Extra Narrow 3° or 5° (1) (11) (12)</div> <div>VN</div> <div>Very Narrow 6° (1) (12)</div> <div>NS</div> <div>Narrow Spot 10° (12)</div> <div>NF</div> <div>Narrow Flood 20° (12)</div> <div>M</div> <div>Medium 30° (12) (13)</div> <div>FL</div> <div>Flood 40° (12)</div> <div>WFL</div> <div>Wide Flood 60° (12) (14) (15)</div> <div>VWFL</div> <div>Very Wide Flood 90° (12) (14) (16) (17)</div> <div>NAS</div> <div>Narrow Asymmetric (1) (12)</div> <div>WW</div> <div>Asymmetric Wallwash (1) (12)</div>	<div>LSLH</div> <div>Linear Spread Lens Horizontal Distribution (19)</div> <div>LSLV</div> <div>Linear Spread Lens Vertical Distribution (19)</div>	<div>BK</div> <div>Black Sandtex®</div> <div>BRZ</div> <div>Bronze Sandtex®</div> <div>SI</div> <div>Silver Sandtex®</div> <div>WH</div> <div>Smooth White</div> <div>BKTX</div> <div>Textured Black</div> <div>BRZTX</div> <div>Textured Bronze Non-Metallic</div> <div>GRATX</div> <div>Textured Medium Gray</div> <div>GRNTX</div> <div>Textured Green</div> <div>WHTX</div> <div>Textured White</div> <div>CC</div> <div>Custom Color & Finish (21) (22) (23)</div>	<div>LT</div> <div>Lumentalk (24) (25)</div> <div>DMX/RDM</div> <div>DMX/RDM Enabled Dimming (26) (27)</div> <div>DALIT8</div> <div>DALI 2 T8 Enabled Dimming 0.1% (6) (28)</div>	<div>SY</div> <div>Short Yoke</div> <div>SRY</div> <div>Short Rotational Yoke (29)</div> <div>RY</div> <div>Rotational Yoke (29)</div> <div>3GV</div> <div>3G ANSI C136.31-2010 Vibration Rating for Bridge Applications</div> <div>CRC</div> <div>Corrosion-Resistant Coating (30) (31)</div>

Notes:

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

2. Not available with XN, VN, NAS and WW optics.

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

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

5. 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.

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

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

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

9. Longer lead time of 10-12 weeks.

10. Consult factory for photometric performance.

11. Nominal distribution is 3° for RGBW30K, RGBW40K and RGBA color options, and 5° for RGB.

12. Factory installed, not interchangeable on site.

13. Cannot be combined with other optics when RGB, RGBW30K, RGBW40K and RGBA color temperatures are specified.

14. Cannot be combined with other optics.

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

16. Not available for LBX HO.
17. Available with MRGBA, MRGBWP and MRGRBWP color temperature options only.

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

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

20. Not available with WFL, VWFL, NAS and WW optics.

21. 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.

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

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

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

25. Not available with Class II double insulated option.

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

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

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

29. Consult factory for applications with 3GV requirements.

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

31. Setup charges apply. Consult factory for details.

How to Order

UL	Unselected	Unselected	
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Certification	Cable Length (27) (33)	Cable Color	Buy America.n Act
UL UL Compliant	3FT 3 ft (27) (33)	BK Black	BAA Buy America.n (34)
CE CE Compliant (32)	10FT 10 ft	WH White (34)	(35)
CEII CE Compliant Class II Double Insulated (32)	20FT 20 ft		
	30FT 30 ft		
	50FT 50 ft		
	70FT 70 ft		
	100FT 100 ft		

Notes:

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

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

33. 3 ft cable length is standard unless otherwise specified.
34. Not available with CE or CEII certification options.

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