MARKCOVE 102

DYNAMIC COLOR

HIGHLIGHTS

- Our smallest profile
- Extruded aluminum construction
- Dynamic RGBW Color
- Lumen outputs: 250, 400 lumens per foot
- Cove optical distribution: 120x120
- Multi-color diode provides superior near-field color mixing
- DMX/Remote device management
- Flicker free dimming to DARK (0.01%)
- Shielding options: frosted lens, partially frosted lens, linear cross baffle, hex cell louver, glare visor
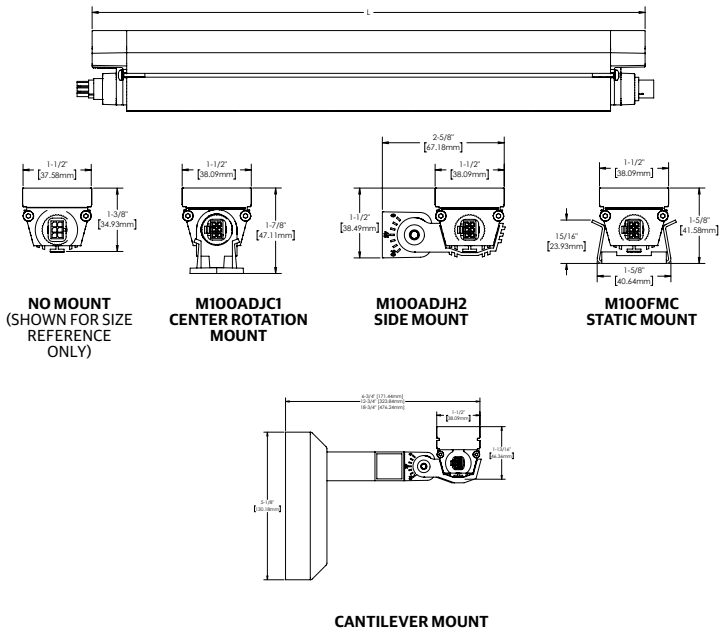- Mounting: surface fixed, surface adjustable

FIXTURE PERFORMANCE

MCV102 RGBW		
Nominal Lumens/Foot	250	400
Delivered Lumens/Foot	701	852
Input Watts/Foot	12.7	16.21
Lumens/Watt	55	53

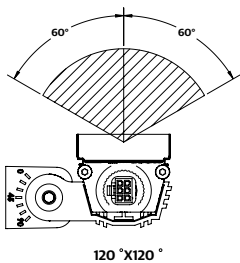Based on a 4FT, RGBW fixture with standard 120x120 distribution

DIMENSIONS

Reference Drawing Detail section for additional information

NO MOUNT (SHOWN FOR SIZE REFERENCE ONLY)

M100ADJC1 CENTER ROTATION MOUNT

M100ADJH2 SIDE MOUNT

M100FMC STATIC MOUNT

CANTILEVER MOUNT

DISTRIBUTION

60°   60°

120°X120°

Buy American

ARCHITAINMENT COLOR

Acuity Brands

ORDERING

Example: MCV102 LLP 24FT MSL4 M100ADJH2 MCLB12 ARTC RGBW 400LMF 120X120DEG DARK MVOLT WTP DMX MFCL25TL

Series	Linear Plan	Total Run Length	Max Section Length	Mounting	Mounting Option
MCV102 MARKCOVE 102	**LLP** Linear Longest Possible **LSL** Linear Same Length **LCB** Linear Center Balance	**_FT** Specify continuous linear feet in 1' increments starting at 1' (Example: 24FT)	**MSL1** 1' **MSL4** 4'	**M100ADJC1** Adjustable Mount Center Axis **M100ADJH2** Adjustable Mount Side Hinge **M100FMC** Fixture Mount **M100CVE** CVE Mount Bracket MCVE Cove must be purchased separately.	**(blank)** No Cantilever Bracket **MCLB6** Cantilever Bracket 6" Projection **MCLB12** Cantilever Bracket 12" Projection **MCLB18** Cantilever Bracket 18" Projection

Dynamic Feature	Dynamic Range	LED Light Output	Direct Distribution	Minimum Dimming Level	Optional Shielding
ARTC Architainment Color	**RGBW** Dynamic Color Red Green Blue White	**250LMF** 250 Nominal Lumens Per Foot **400LMF** 400 Nominal Lumens Per Foot	**120x120DEG** 120 x 120 Degrees	**DARK** Constant Current, Dimming to <1%	**(blank)** No Optional Shielding **MBFB** Baffle Linear Surface, Black **MGVB** Glare Visor Linear Surface, Black **MHCB** Hexagonal Cell Louver, Black **MFCA** Frosted Clear Acrylic

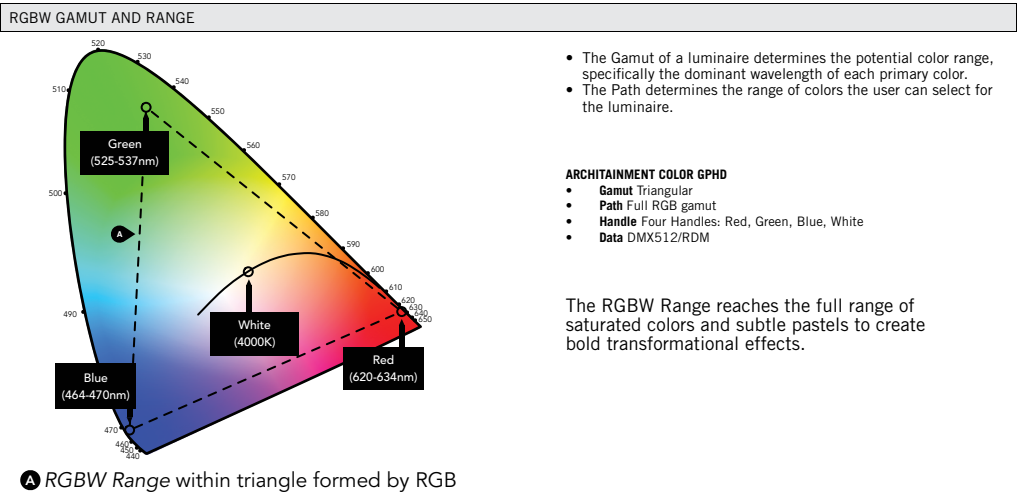| Voltage	Shielding	Finish	Control Input	Power Feed	Options
MVOLT 120 - 277 Volt Input **347*** 347 Volt *347 comes with a remote driver kit.	**(blank)** Frosted Acrylic **PFCA** Partial Frost Clear Acrylic	**WTP** White Textured **BKT** Black Textured **SIT** Silver Textured **RALTBD** RAL Color TBD RALTBD is for pricing only. Replace with applicable RAL number when placing order.	**DMX** DMX	**MFCL10TL** Left 10FT Feed Cable (Female) **MFCL10TR** Right 10FT Feed Cable (Male) **MFCL25TL** Left 25FT Feed Cable (Female) **MFCL25TR** Right 25FT Feed Cable (Male) **MFCL50TL** Left 50FT Feed Cable (Female) **MFCL50TR** Right 50FT Feed Cable (Male) **MFCL100TL** Left 100FT Feed Cable (Female) **MFCL100TR** Right 100FT Feed Cable (Male) **NOFCL** No Power Feed Cable **M100BL*** * M550 Wire Splice Box Left **M100BR*** * M550 Wire Splice Box Right **M100W*** M550 Conduit Whip *M100CVE is only available with M100WP.	**CP*** * Chicago Plenum

PERFORMANCE DATA

Lumens Per Foot	Fixture Length	Distribution	Delivered Lumens	Input Watts	Lumens/Watt	Delivered Lumens Per Foot	Input Watts Per Foot
250	1FT	120x120	701	12.7	55.19685039	701	12.7
	4FT	120x120	2817	51.36	54.84813084	704	12.84
400	1FT	120x120	852	16.21	52.56014806	852	16.21
	4FT	120x120	3421	65.56	52.18120805	855	16.39

Lumen Values are from photometric test performed in accordance with IESNA LM-79-08. Data is considered to be repesentative of the configuration shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of en-user environment and application. Consult www.marklighting.com for performance data on any configuratations not shown here.
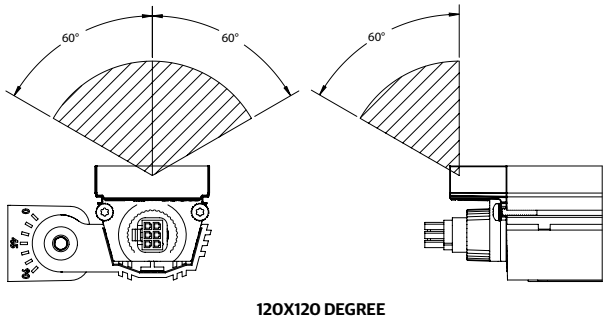
LUMEN MULTIPLIERS

Shielding	Multiplier
PFCA	0.98
MBFB	0.27
MHCB	0.13
MFCA	0.89
MGVB	0.70

This table can be used to approximate the lumen values at different Kelvin temperatures and Color Rendering Index. Power consumption would stay the same.

RGBW GAMUT AND RANGE

Ⓐ *RGBW Range* within triangle formed by RGB

- The Gamut of a luminaire determines the potential color range, specifically the dominant wavelength of each primary color.
- The Path determines the range of colors the user can select for the luminaire.

ARCHITAINMENT COLOR GPHD
- **Gamut** Triangular
- **Path** Full RGB gamut
- **Handle** Four Handles: Red, Green, Blue, White
- **Data** DMX512/RDM

The RGBW Range reaches the full range of saturated colors and subtle pastels to create bold transformational effects.

DISTRIBUTION

Note: Shown with M100ADJH2 mount

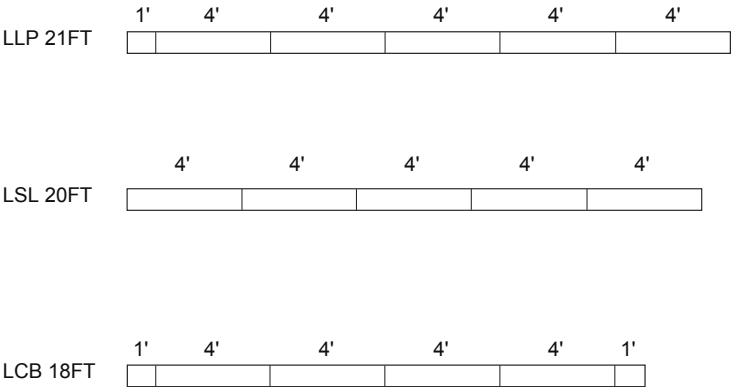**120X120 DEGREE**

MARKCOVE 102
Dynamic Color

LINEAR PLAN

Mark offers the ability to provide a continuous run plan to suit your requirements by optionally offering three methods of configuration.

LLP Longest Length Possible:
In this plan the longest length available is optimized resulting in the fewest segments and mounting locations. Caution should be used where balanced appearance is a concern. Example: 21FT row would have (5) 4FT segments and (1) 1FT segment located at one end.
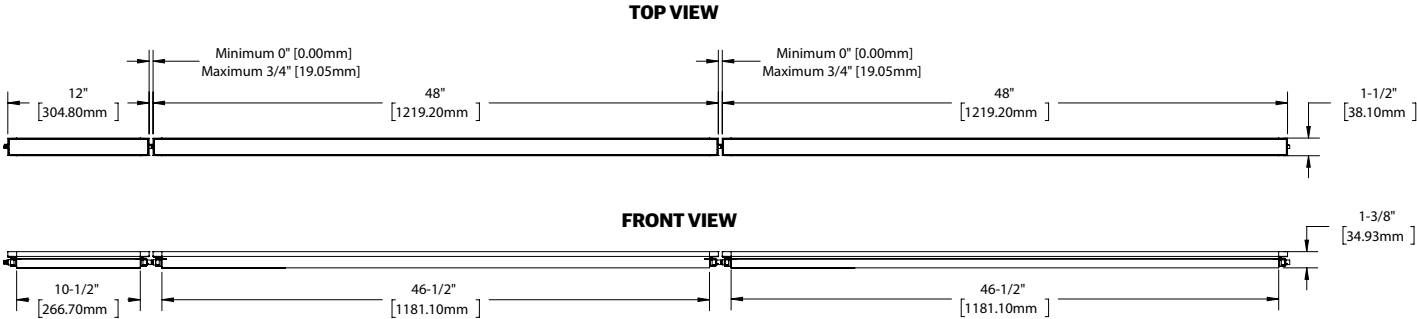
LSL Longest Same Length:
In this configuration each segment is the same length is standardized based on the longest length available and is the only option provided. Because it is dependent on one segment length there are mathematical limitations on what overall row lengths can be achieved. Example: 20FT row would be achieved with (5) 4FT long segments equaling 20FT (nominal).

LCB Longest Center Balanced:
This configuration incorporates the longest center segment(s) along with any additional lengths required to fill located at each end. Example: 18FT row would have (2) 1FT segments (one at each end) and (4) 4FT intermediate segments located in between.
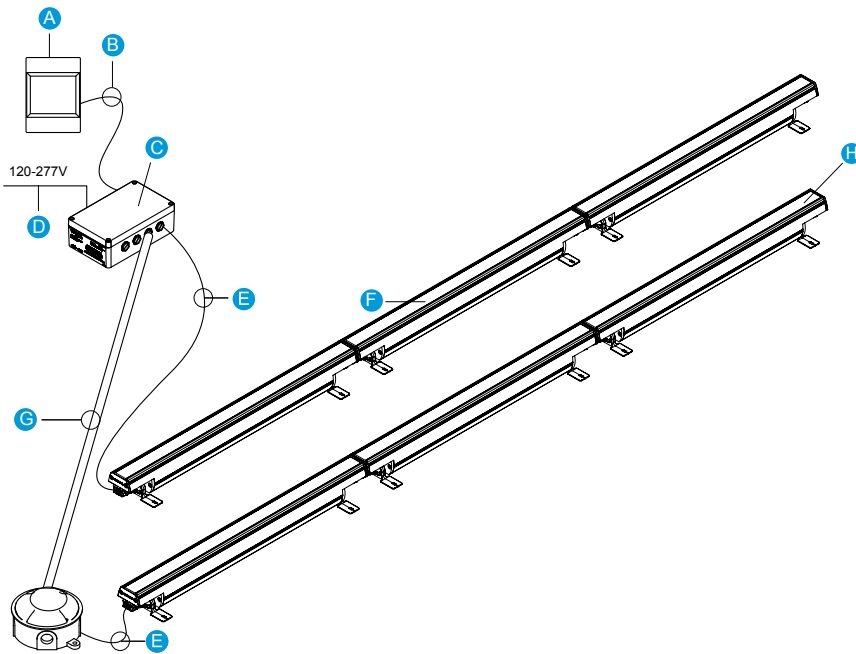
LLP 21FT — | 1' | 4' | 4' | 4' | 4' | 4' |

LSL 20FT — | 4' | 4' | 4' | 4' | 4' |

LCB 18FT — | 1' | 4' | 4' | 4' | 4' | 1' |

DRAWING DETAILS

MCV102 Series Typical End-To-End Run Configuration

TOP VIEW

Minimum 0" [0.00mm]
Maximum 3/4" [19.05mm]

12" [304.80mm]   48" [1219.20mm]   48" [1219.20mm]   1-1/2" [38.10mm]

FRONT VIEW

1-3/8" [34.93mm]

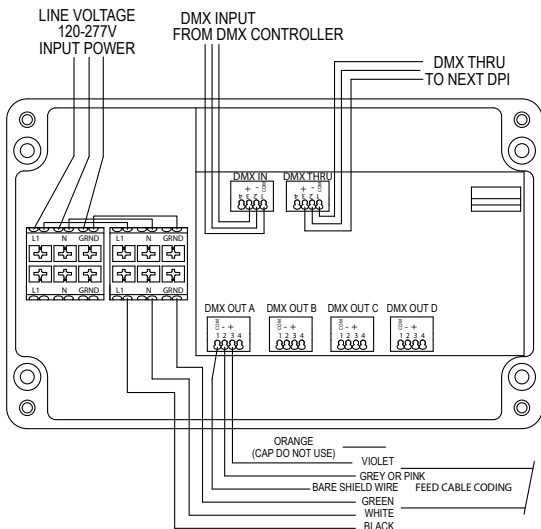10-1/2" [266.70mm]   46-1/2" [1181.10mm]   46-1/2" [1181.10mm]

BASIC SYSTEM WIRING INFORMATION WITH DMX

This very basic system wiring diagram provides an overview of components and materials required for a simple installation of MKS501 luminaires controlled by a DMX controller. These diagrams should not be used in place of actual installation instructions or submittal drawings prepared for a specific project.

Power & DMX Connection in DPI Box

LINE VOLTAGE 120-277V INPUT POWER
DMX INPUT FROM DMX CONTROLLER
DMX THRU TO NEXT DPI

ORANGE (CAP DO NOT USE)
VIOLET
GREY OR PINK
BARE SHIELD WIRE — FEED CABLE CODING
GREEN
WHITE
BLACK

A dynamic luminaire installation can be as simple as a single luminaire and one control to many different luminaires in multiple locations being triggered and manipulated in real time. Consulting with the factory at the beginning stages of the project will ensure the required equipment be specified and properly installed.

Note: For multiple runs and multiple DPI boxes, consult factory.

Note: No more than four DPI Boxes, in series, can be utilized between the DMX Controller and any luminaire.

A DMX controller providing one universe of DMX-512 control.

To supply a complete system RDM set-up and playback control solution, use:

Easyl
• Three versions available from entry-level to show creation using computer software
• Full color LCD touchscreen
• Recall colors, shows, and effects with one touch

Fresco
• Manage multiple light sources in multiple lighting zones, all from one controller
• On screen lighting design and set-up, no computer required or Ethernet connection for remote configuration and advanced control
• All device settings are stored on-board in non-volatile memory

B Belden 9829 cable is the preferred communication/ data cable used to carry the DMX signal to and from the DPI Box. The total length of this cable must not exceed 1000 feet from the DMX controller to the DPI Box. No luminaires should be installed between DMX Controller and any DPI Box.

C DPI box (Data Power Integration) is used to bundle DMX to line voltage and deliver them to the luminaire. This box provides necessary isolation between the DMX control and line voltage and is required for all MKS501 installations. The DPI box also serves as a 4-channel splitter enabling up to 128 fixtures to be controlled from a single DPI box. Refer to DPI Installation Sheet for dimensions and mounting details.

D 120V-277V input to DPI box. Metallic conduit and standard fittings are compatible as are multi-conductor cords provided they are appropriate to the mounting location.

E Feed cable connects junction box with first fixture in a run. 14 ga. conductors carry power, shielded 18 ga. conductors carry data. Input end is stripped for connection to the Junction or DPI box, output end includes a male or female plug for fixture connection. Also included with each feed cable is a termination/ sealing cap for the end of each run. Contact factory for availability of custom feed cable lengths.

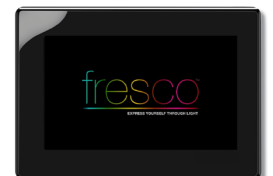**F** Consult Fixture Installation Instructions, for Luminaire Run Length Limits table.

G Power and Data can be run to junction box locations in rigid conduit. Use Belden 9829 for data and copper wire per local code for power. Use appropriate fitting for combination cord.

H To ensure data integrity, a termination/sealing cap with 120 Ohm resistor is required at the last luminaire in each run. See installation instructions.

**Easyl Controller**

**Fresco Control System**

ACCESSORY OPTIONS

Feed Cables
*Minimum of one feed cable, left or right, required per installation

Carries DMX or NON-DMX signal and 120-277 line voltage power to right end of first fixture in run.
Supplied with termination/sealing cap.
Use one feed cable per run only.

Model		Cord Color		DMX	
MFCL10TL	Left 10FT Feed Cable	**WCRD**	White Cord	**DXP**	DMX Plug
MFCL25TL	Left 25FT Feed Cable			**NDXP**	Non-DMX Plug
MFCL50TL	Left 50FT Feed Cable	**BCRD**	Black Cord		
MFCL100TL	Left 100FT Feed Cable				
MFCL10TR	Right 10FT Feed Cable				
MFCL25TR	Right 25FT Feed Cable				
MFCL50TR	Right 50FT Feed Cable				
MFCL100TR	Right 100FT Feed Cable				

Left Feed
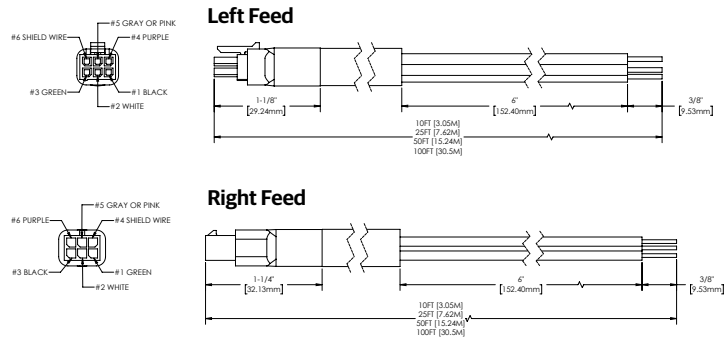
Right Feed

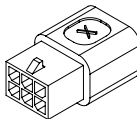**Right Feed Dust Cap**
(Included with NDXP)
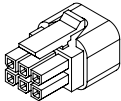
Right Feed DMX Terminator Cap
(Included with DXP)
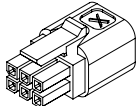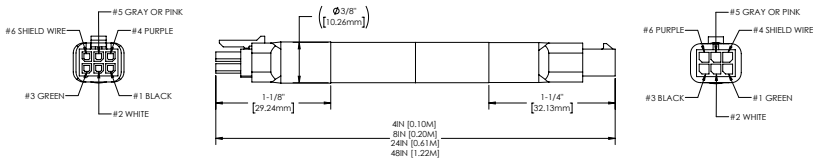
Left Feed Dust Cap
(Included with NDXP)
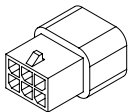
Left Feed DMX Terminator Cap
(Included with DXP)

Jumper Cable *Optional*

Carries DMX or NON-DMX signal and 120-277 line voltage power between two units in a run when larger spacing between units is required.

| Model		Cord Color	
MJCLM2	2FT Jumper Cable	**WCRD**	White Cord
MJCLM4	4FT Jumper Cable	**BCRD**	Black Cord
MJCLM4IN	4IN Jumper Cable		
MJCLM8IN	8IN Jumper Cable		

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ACCESSORY OPTIONS (CONTINUED)

Wire Splice Box, *Optional*

Replaces feed cable for areas where flexible cord cannot be used to bring input DMX or NON_DMX signal and 120-277 line voltage power to right end of beginning of run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections. Supplied with termination/sealing cap. *Use one wire splice box per run only.*

Model		Direct Distribution		Finish		DMX	
M100BXL	M100 Wire Splice Box Left	120X120DEG	120 x 120 Degrees	WTP	White Textured	DXP	DMX Plug
M100BXR	M100 Wire Splice Box Right			BKT	Black Textured	NDXP	Non-DMX Plug
M100WP	M100 Conduit Whip			SIT	Silver Textured		
				RALTBD	RAL Color TBD		

Right Feed

7/8 KNOCKOUT

Left Feed

7/8 KNOCKOUT
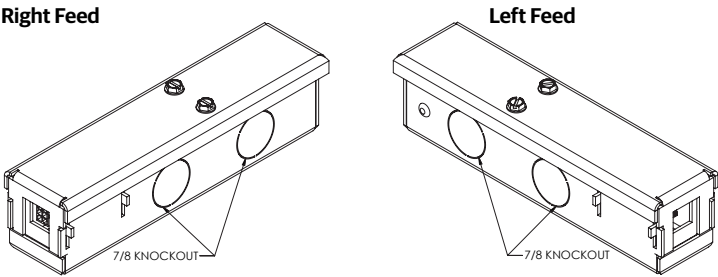
ACCESSORY OPTIONS (CONTINUED)

Glare Visor (Linear) *Optional*

Model		Fixture Section	
MGVB1	Glare Visor, Black	U1	1FT Length Unit
		U1/6	1' 6" Length Unit
		U4	4FT Length Unit
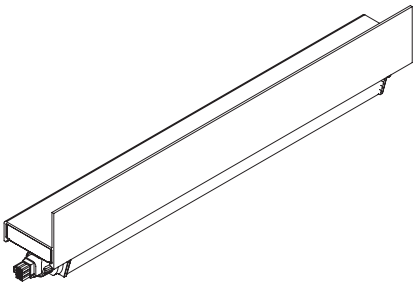
Reference Accessory Details document for dimensions

Baffle (Linear) *Optional*

Model		Fixture Section	
MBFB1	Baffle Linear Surface, Black	U1	1FT Length Unit
		U1/6	1' 6" Length Unit
		U4	4FT Length Unit
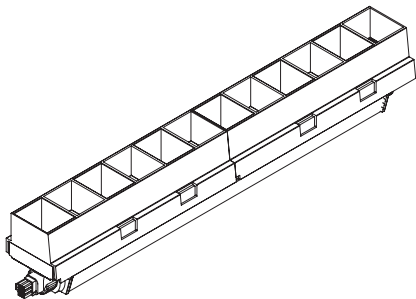
Reference Accessory Details document for dimensions

Hexagonal Cell *Optional*

Model		Fixture Section	
MHCB1	Hexagonal Cell Louver, Black	U1	1FT Length Unit
		U1/6	1' 6" Length Unit
		U4	4FT Length Unit
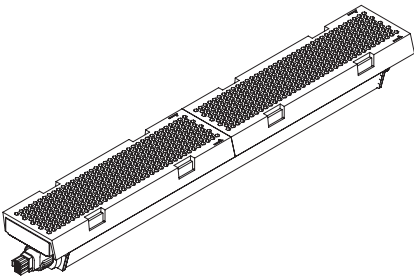
Reference Accessory Details document for dimensions

Frosted Clear *Optional*

Model		Fixture Section	
MFCA1	Frosted Clear Acrylic	U1	1FT Length Unit
		U1/6	1' 6" Length Unit
		U4	4FT Length Unit
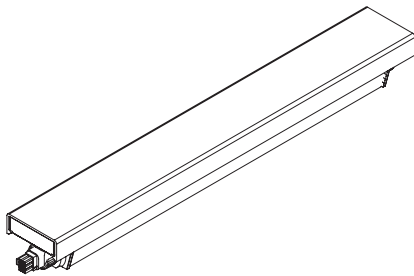
Reference Accessory Details document for dimensions

Cantilever Brackets *Optional*

Series		Finish	
MCLB6	Cantilever Bracket 6" Projection	BKT	Black Textured Paint
MCLB12	Cantilever Bracket 12" Projection	SIT	Silver Textured Paint
MCLB18	Cantilever Bracket 18" Projection	WTP	White Textured Paint
		RALTBD	RAL Paint Finish
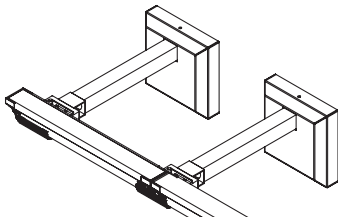
Reference Accessory Details document for dimensions

SPECIFICATIONS

Voltage: 120 through 277v/60Hz

Distribution: 120° X 120° (Lambertian)

Size: 1.5 W x 1.75 H

Housing: Extruded aluminum snap together construction

Finish: Polyester powder coat painted finish. Natural stainless steel fasteners.

Lens Material: Extruded acrylic

Dominant Wavelengths: RED (623nm), GREEN (523nm), BLUE (451nm)

LED Color Mix: 12 (4-in-1 LEDs) per 12 inches

Ambient Temperature Ranges: -20° to +45°C

Mounting: Suitable for mounting within the space between ground and 4FT (1.2M) of the ground. Suitable for damp location applications.

Certification/Compliance: CSA Certified to meet U.S. and Canadian standards conforming to UL 1598 and CAN/CSA C22.2 No. 250.0

Buy American: This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.