

SPECIFICATIONS

TYPE:

PROJECT:



MARKCOVE

STATIC WHITE & COLOR

HIGHLIGHTS

- Created for integration with the MARKCOVE MCVE integrated cove extrusion profiles (sold separately)
- Available in 2, 3, and 4-foot lengths
- Two distributions: Asymmetric and Symmetric Injection molded optics for consistent aesthetic appearance
- Lumen outputs from 400 to 1200 lumens per foot
- Five static white color temperatures in two CRI options
- Cable and wire splice box selections available for installation ease
- Optional fixed mount hardware for independent mounting
- Flicker-free dimming to dark (0.1%) powered by eldoLED® drivers
- Alternate DALI, ELV, and Lutron® dimming solutions
- nLight® enabled system networking wired and wireless
- Standard in semi-gloss white powder paint finish with optional RAL, or custom color selections
- Total System Integration features a 5-year limited warranty by Acuity Brands covering all components and construction

LUMEN OUTPUT

MCV504 STATIC WHITE								
Nominal Lumens	400LMF	600LMF	800LMF	1000LMF	1200LMF			
Delivered Lumens	456	690	914	1141	1417			
Input Watts	3.6	5.5	7.5	9.7	13.0			
Lumens/Watt	127	125	122	118	109			

^{**} Performance data based upon ASYM/35K /80CRI

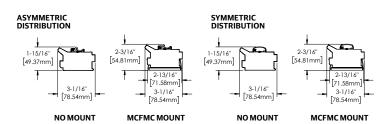
MCV504 COLOR							
Nominal Lumens	RED	GRN	BLU	AMB			
Delivered Lumens Per FT	403	982	293	343			
Input Watts	5.6	6.9	7.5	6.0			
Lumens/Watt	71	141	39	57			

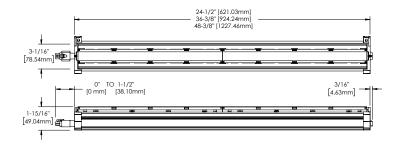
^{**} Performance data based upon ASYM Optic



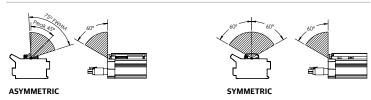
DIMENSIONS

Reference Drawing Detail section for additional information





STANDARD DISTRIBUTION



COMPANION LUMINAIRE(S)







MCVE KEC MUD MARKCOVE Extrusion Knife Edge Mud In



MCVE SEC DWM MARKCOVE Extrusion Square Edge Dry Wall



MCVE SEC MUD MARKCOVE Extrusion Square Edge Mud In



















MCV504_STWH_STCLR 04/02/24



Integrated Cove Luminaire Static White & Color

Example: MCV504 LLP 24FT MSL4 90CRI 35K 800LMF ASYM DARK MVOLT SGW ZT MFCLC25L **ORDERING** Example: MCV504 LLP 17FT MSL3 GRN 120X120DEG MIN1 MVOLT SGW DALI MCVFWP Direct Light Source Color Rendering Max Section Length Series Linear Plan **Total Run Length** Mounting **Direct LED Color Temp** MARKCOVE 504 Linear Longest Possible Total Run Length. Specify feet in 1' increments starting at 2'. (Example: 24FT) MSL2 2' Installing into MARKCOVE MCVE extrusion MCV504 (blank) Color LEDs 27K 2700K ΔMR Amber **MSL3** 3' 80CRI 80CRI **30K** 3000K BLU Blue LSL Linear Same MSL4 4' 90CRI 90CRI 35K 3500K GRN Green MCFMC Fixed mount kit Length 40K 4000K RFD Red LCB Linear Center 50K 5000K Direct LED Light Output **Direct Distribution** Voltage Finish **Minimum Dimming Level** (blank) Color LEDs 120X120DEG 120 x 120 degrees DARK Constant Current, Dimming to <1% MVOLT 120-277 Volt SGW Semi-Gloss White Paint 400 Nominal Lumens per Foot 120 Volt RALTBD RAL Color TBD ASYM Constant Current, Dimming to 1% 120* Asymmetric RALTBD is for pricing only. Replace with applicable RAL number when placing order. 600LMF*** 600 Nominal Lumens per Foot MIN5* Constant Current, Dimming to 5% 347** 347 Volt 800LMF 800 Nominal Lumens per Foot *Only available with 120 & FLV. *Only available with MIN5 Not available with color LEDs. 1000LMF 1000 Nominal Lumens per Foot **Provided as a remote stepdown transformer 1200LMF* 1200 Nominal Lumens per Foot *Not available with ECOD or in 3FT/4FT 120 MIN5 ELV **Not available with ELV option ***Not available in 2FT 120 MIN5 ELV **Control Input** Power Feed Options MCVFRXL DALI DALL Wire splice box left (blank) No Options ELV* Phase Dimming MCVFBXR Wire splice box right Chicago Plenum NLIGHT MCVFWP* CP is only available with NLIGHT or NLTAIR2. nLight Enabled Conduit whip **NLTAIR2** nLight AIR (wireless) Enabled Left 100ft feed cable female MFCLC100L ZΤ 0-10V MFCLC100R Right 100ft feed cable, male ECOD** Lutron Hi-Lume EcoSystem MFCLC10L Left 10ft feed cable, female Digital LED Driver, 1% dimming MFCLC10R Right 10ft feed cable, male *Only available with MIN5 MFCLC25L Left 25ft feed cable female **Only available with MIN1 MFCLC25R Right 25ft feed cable, male MFCLC50L Left 50ft feed cable, female MFCLC5OR Right 50ft feed cable male NOFCL No Power Feed Cable *Required when installing with MARKCOVE MCVE Extrusion.

	LENGTH	WEIGHT
MCV504	24-1/2" (621mm)	3.0 Lbs
	36-3/8" (924mm)	5.0 Lbs
	48-3/3" (1227mm)	6.0 Lbs



Integrated Cove Luminaire Static White & Color

PERFORMANCE DATA

Static White

Lumens Per Foot	Fixture Length	Distribution	ССТ	CRI	Delivered Lumens	Input Watts	Lumen/ Watt
	2FT	ASYM	35K	80	908	7.2	126
	2FT	120X120DEG	35K	80	1002	7.2	139
400	3FT	ASYM	35K	80	1383	10.8	128
400	3FT	120X120DEG	35K	80	1527	10.8	141
	4FT	ASYM	35K	80	1847	14.4	128
	4FT	120X120DEG	35K	80	2039	14.4	142
	2FT	ASYM	35K	80	1311	10.7	123
	2FT	120X120DEG	35K	80	1448	10.7	135
500	3FT	ASYM	35K	80	1999	16.0	125
600	3FT	120X120DEG	35K	80	2207	16.0	138
	4FT	ASYM	35K	80	2669	21.5	124
	4FT	120X120DEG	35K	80	2947	21.5	137
	2FT	ASYM	35K	80	1754	14.7	119
	2FT	120X120DEG	35K	80	1936	14.7	132
900	3FT	ASYM	35K	80	2673	22.0	122
800	3FT	120X120DEG	35K	80	2951	22.0	134
	4FT	ASYM	35K	80	3569	29.5	121
	4FT	120X120DEG	35K	80	3940	29.5	134

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

 ${\it IES\, data\, is\, available\, at\, https://winonalighting.acuity brands.com/\,\, Refer\, to\, website\, for\, the\, latest\, {\it IES\, file\, updates.}}$

Static Color

Lumens Per Foot	Fixture Length	Distribution	Delivered Lumens	Input Watts	Lumen/ Watt	Delivered Lumens Per Foot	Input Watts Per Foot
	2FT	ASYM	689	12.4	56	345	6.20
	2FT	120X120DEG	760	12.4	61	380	6.20
RED	3FT	ASYM	1009	17.6	57	336	5.87
KED	3FT	120X120DEG	1114	17.6	63	371	5.87
	4FT	ASYM	1662	22.7	73	416	5.68
	4FT	120X120DEG	1835	22.7	81	459	5.68
	2FT	ASYM	1681	15.2	111	841	7.60
	2FT	120X120DEG	1855	15.2	122	928	7.60
CDEEN	3FT	ASYM	2463	21.5	115	821	7.17
GREEN	3FT	120X120DEG	2719	21.5	126	906	7.17
	4FT	ASYM	4058	27.8	146	1015	6.95
	4FT	120X120DEG	4479	27.8	161	1120	6.95
	2FT	ASYM	509	16.4	31	255	8.20
	2FT	120X120DEG	562	16.4	34	281	8.20
BLUE	3FT	ASYM	746	23.2	32	249	7.73
BLUE	3FT	120X120DEG	823	23.2	35	274	7.73
	4FT	ASYM	1228	30	41	307	7.50
	4FT	120X120DEG	1356	30	45	339	7.50
	2FT	ASYM	593	13.2	45	297	6.60
	2FT	120X120DEG	654	13.2	50	327	6.60
AMARER	3FT	ASYM	869	18.6	47	290	6.20
AMBER	3FT	120X120DEG	959	18.6	52	320	6.20
	4FT	ASYM	1432	24.1	59	358	6.03
	4FT	120X120DEG	1580	24.1	66	395	6.03

Lumen values are from photometric tests performed in accordance with IESNALM-79-08. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

 $IES\ data\ is\ available\ at\ https://winonalighting.acuity brands.com/\ Refer\ to\ website\ for\ the\ latest\ IES\ file\ updates.$

Lumens Per Foot	Fixture Length	Distribution	ССТ	CRI	Delivered Lumens	Input Watts	Lumen/ Watt
	2FT	ASYM	35K	80	2165	19.0	114
	2FT	120X120DEG	35K	80	2390	19.0	126
1000	3FT	ASYM	35K	80	3300	28.3	117
1000	3FT	120X120DEG	35K	80	3643	28.3	129
	4FT	ASYM	35K	80	4405	38.0	116
	4FT	120X120DEG	35K	80	4864	38.0	128
	2FT	ASYM	35K	80	2708	25.4	107
	2FT	120X120DEG	35K	80	2989	25.4	118
1200	3FT	ASYM	35K	80	4127	37.9	109
1200	3FT	120X120DEG	35K	80	4557	37.9	120
	4FT	ASYM	35K	80	5510	51.0	108
	4FT	120X120DEG	35K	80	6084	51.0	119

Lumen Multipier Table, Static White only

Data table baseline is 3500K 80CRI photometry. This table can be used to approximate the lumen values at different Kelvin temperatures and Color Rendering Index. Power consumption would stay the same.

сст	CRI	Multiplier
27K	80	0.960
30K	80	0.991
35K	80	1.000
40K	80	1.000
50K	80	1.052
27K	90	0.815
30K	90	0.833
35K	90	0.854
40K	90	0.869
50K	90	0.927

Lumen Multipier Table for when used in CVE Extrusion For both Static White and Color

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

Distribution	stribution Lens	
ASYM	none	0.849
120X120DEG	none	0.904
ASYM	clear	0.780
120X120DEG	clear	0.835
ASYM	frosted	0.763
120X120DEG	frosted	0.818

Integrated Cove Luminaire Static White & 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: 22FT row would have (5) 4FT segments and (1) 2FT 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: 22FT row would have (2) 3FT segments (one at each end) and (4) 4FT intermediate segments located in between.

	2'	4'	4'	4'	4'	4'
LLP 22FT						



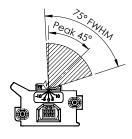
	3'	4'	4'	4'	4'	3'
LCB 22FT						

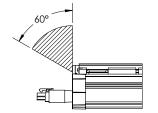
DISTRIBUTION

ASYMMETRIC

+/-10° ADJUSTMENT

In 5° increment rotation

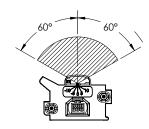


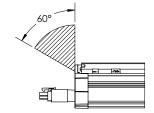


SYMMETRIC

+/-10° ADJUSTMENT

In 5° increment rotation





INTELLIGENT LUMINAIRE TECH GUIDE

Choose nomenclature from these columns

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Minimum Dimming Level		Control Input	
MIN5	+	ELV	=
MIN1	+	ZT	=
MIN1	+	DALI	=
MIN1	+	NLIGHT	=
MIN1	+	NLTAIR2	=
MIN1	+	ECOD	=
DARK	+	ZT	=
DARK	+	DALI	=
DARK	+	NLIGHT	=
DARK	+	NLTAIR2	=

Driver
ERP POWER Constant Current Driver
eldoLED ECOdrive
DALI compatible, eldoLED ECOdrive
eldoLED ECOdrive
eldoLED ECOdrive
LUTRON EcoSystem
eldoLED SOLOdrive
DALI compatible, eldoLED ECOdrive
eldoLED SOLOdrive
eldoLED SOLOdrive

Dimming Range
100 to 1%
100 to 0.1%

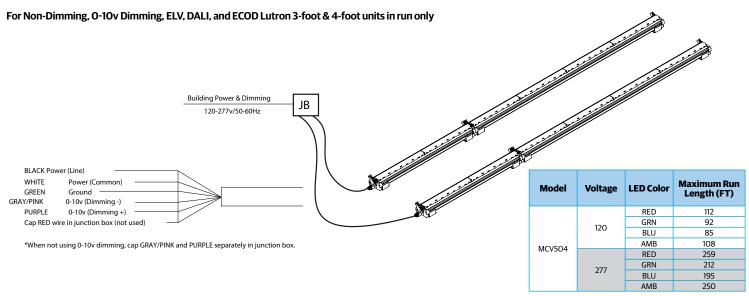
Notes		
ELV Dimming		
Linear dimming		
Compatible with DALI. Linear dimming		
Linear dimming		
Linear dimming		
*For 2FT Units = LUTRON Hi-Lume Premier 0.1% EcoSystem LED Driver with Soft-on, Fade-to-Balck (model PEQO) *For 3FT & 4FT Units = LUTRON Hi-lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black (model LDE1)		
Linear dimming		
Compatible with DALI. Linear dimming		
Linear dimming		
Linear dimming		



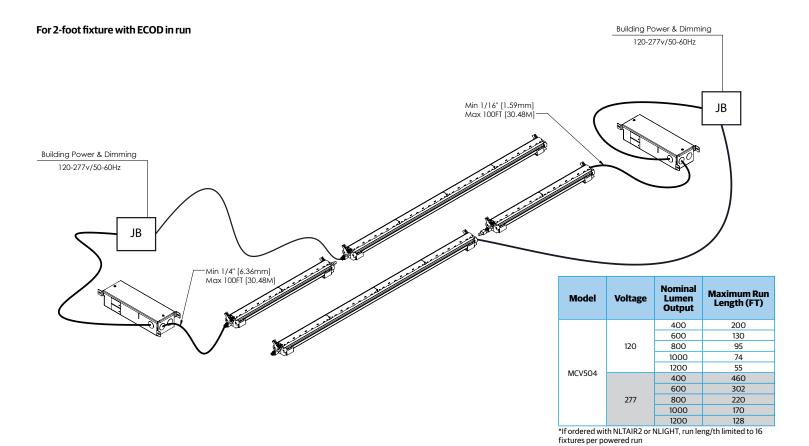
Integrated Cove Luminaire Static White & Color

SYSTEM WIRING (WHEN NOT USED WITHIN MCVE COVE EXTRUSION)

Basic system wiring diagram provides an overview of components and materials required for a simple installation of MCV504 luminaires controlled by building system power (By Others). These diagrams should not be used in place of actual installation instructions or submittal drawings prepared for a specific project.



 $^{^{*}\}mbox{If ordered}$ with NLTAIR2 or NLIGHT, run length limited to 16 fixtures per powered run



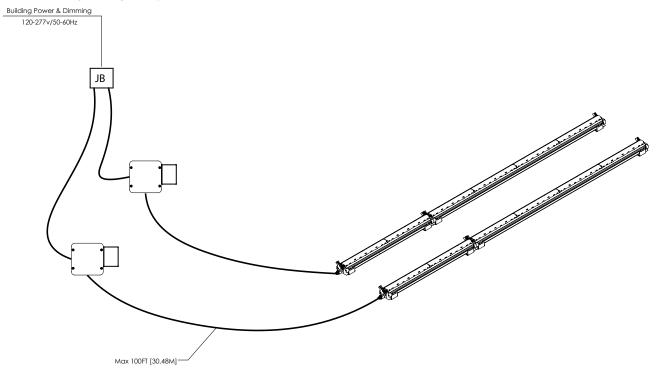


Integrated Cove Luminaire Static White & Color

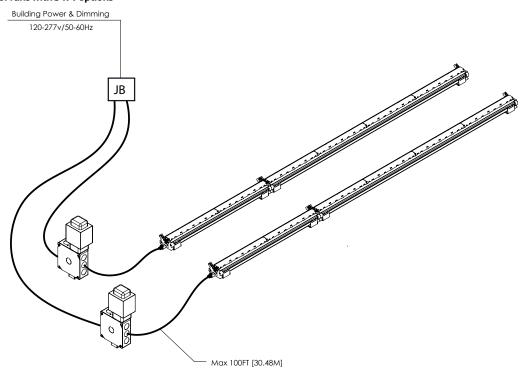
SYSTEM WIRING (WHEN NOT USED WITHIN MCVE COVE EXTRUSION)

Basic system wiring diagram provides an overview of components and materials required for a simple installation of MCV504 luminaires controlled by building system power (By Others). These diagrams should not be used in place of actual installation instructions or submittal drawings prepared for a specific project.

For runs with nLight or nLight Air options



For runs with 347v options





Integrated Cove Luminaire Static White & Color

ACCESSORY OPTIONS

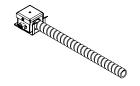
Conduit Whip Box

Required when using MARKCOVE MKCE cove extrusion

*Minimum of one required per fixture run

Series

MCVFWP Conduit Whip



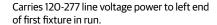
Conduit whip box allows for proper wire termination from building supply wire, through wall, into extrusion, and to fixture run

Feed Cable, Left Feed (Female Plug)

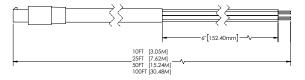
*Minimum of one required per fixture run when not using MARKCOVE MKCE cove extrusion

Series

MFCLC10LLeft 10FT Feed Cable (Female)MFCLC25LLeft 25FT Feed Cable (Female)MFCLC50LLeft 50FT Feed Cable (Female)MFCLC100LLeft 100FT Feed Cable (Female)



Use one feed cable per run only.



Feed Cable Right Feed (Male Plug)

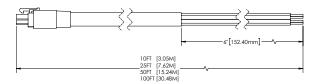
 ${}^*\!Minimum\,of\,one\,required\,per\,fixture\,run\,when\,not\,using\,MARKCOVE\,MKCE\,cove\,extrusion\,and\,angles$

Series

MFCLC10RRight 10FT Feed Cable (Male)MFCLC25RRight 25FT Feed Cable (Male)MFCLC50RRight 50FT Feed Cable (Male)MFCLC100RRight 100FT Feed Cable (Male)

Carries 120-277 line voltage power to right end of first fixture in run.

Use one feed cable per run only.

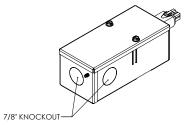


Wire Splice Box, Left Feed (Female Plug) *Optional*

 ${}^*\!Minimum\ of\ one\ wire\ splice\ box, left\ or\ right,\ per\ fixture\ run\ when\ not\ using\ MARKCOVE\ MKCE\ extrusion$

Series

MCVFBXL Wire Splice Box Left



Replaces feed cable for areas where flexible cord cannot be used to bring 120-277 line voltage power to left end of first fixture in run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections.

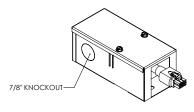
Use one wire splice box per run only.

Wire Splice Box, Right Feed (Male Plug) *Optional*

*Minimum of one wire splice box, left or right, per fixture run when not using MARKCOVE MKCE extrusion

Series

MCVFBXR Wire Splice Box Right



Replaces feed cable for areas where flexible cord cannot be used to bring 120-277 line voltage power to right end of first fixture in run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections.

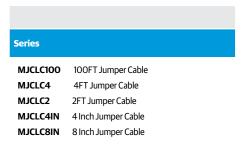
Use one wire splice box per run only.

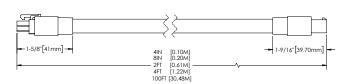


Integrated Cove Luminaire Static White & Color

ACCESSORY OPTIONS

Jumper Cable *Optional*



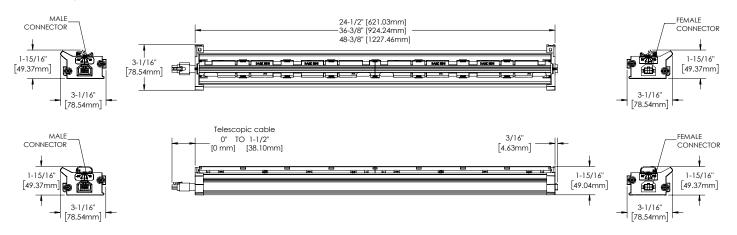


Carries 120-277 line voltage power between two units in a run when larger spacing or corner turn between units is required. Jumpers may be plugged together to create longer jumper. For every jumper-to-jumper connection, calculate as a 2-foot fixture to apply proper voltage drop.

DRAWING DETAILS

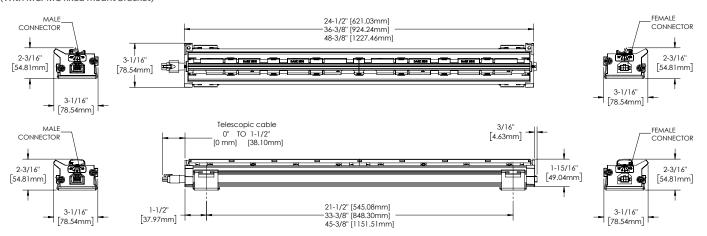
MCV504 Asymmetric & Symmetric

(When mounting into MCVE Extrusion)



MCV504 Asymmetric & Symmetric

(With MCFMC fixed mount bracket)



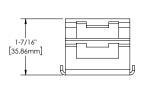


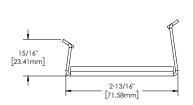
Integrated Cove Luminaire Static White & Color

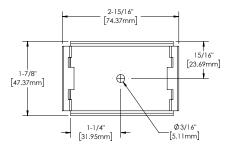
DRAWING DETAILS (CONTINUED)

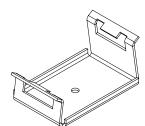
MCFMC Fixed Mount Clip

*For use when NOT mounting within MCVE Cove Extrusion



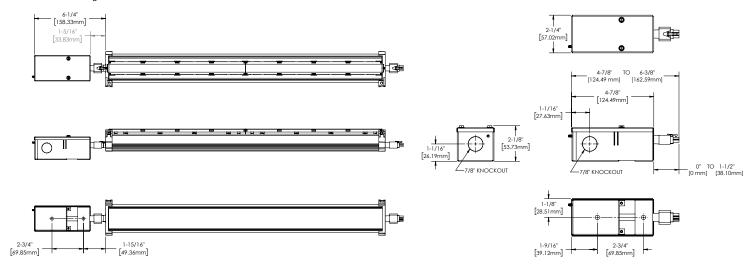






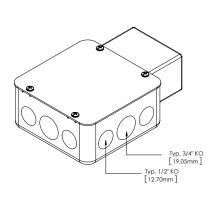
MCVFBXL / MCVFBXR Wire Splice Box

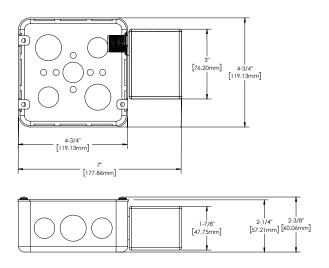
(Same dimensions apply for left or right feed)
For use when NOT mounting within MCVE Cove Extrusion



MRDBXC NLIGHT or NLTAIR2 - Remote box

For applications WITH or WITHOUT using MARKCOVE MCVE cove extrusion





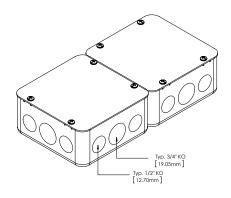


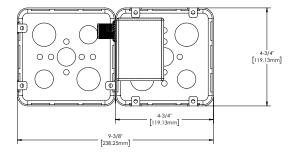
Integrated Cove Luminaire Static White & Color

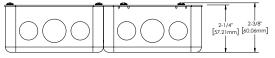
DRAWING DETAILS (CONTINUED)

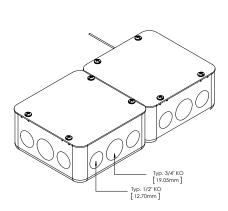
MRDBXC NLIGHT CP & NLTAIR2 CP - Remote box with Chicago Plenum option

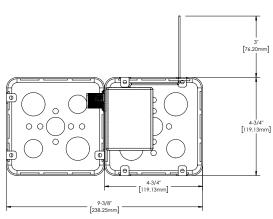
For applications WITH or WITHOUT using MARKCOVE MCVE cove extrusion





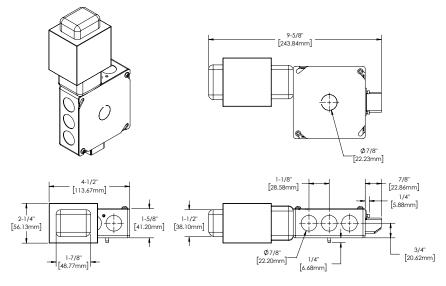






MRTBX - Remote 347v Transformer Box

For applications WITH or WITHOUT using MARKCOVE MCVE cove extrusion

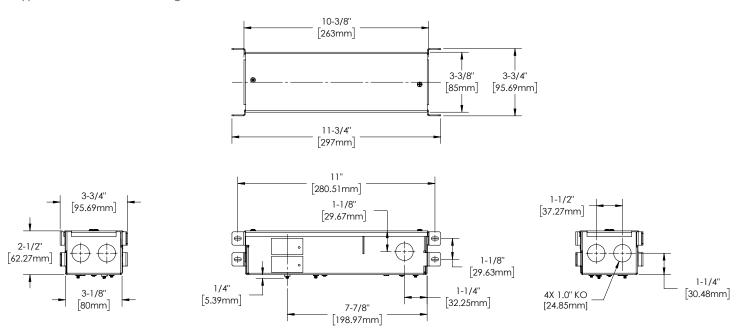


Integrated Cove Luminaire Static White & Color

DRAWING DETAILS (CONTINUED)

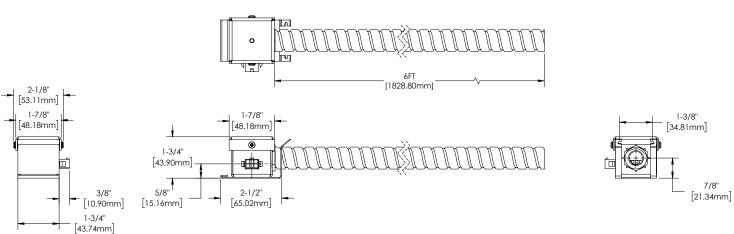
MRDBXC ECOD - Remote box for LUTRON driver with 2-foot unit only

For applications WITH or WITHOUT using MARKCOVE MCVE cove extrusion



Conduit Whip Box - REQUIRED when using MARKCOVE MCVE cove extrusion

*Minimum of one required per fixture run ALWAYS located on left end of run (Painted white box)

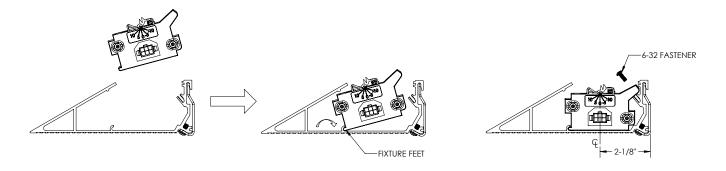




Integrated Cove Luminaire Static White & Color

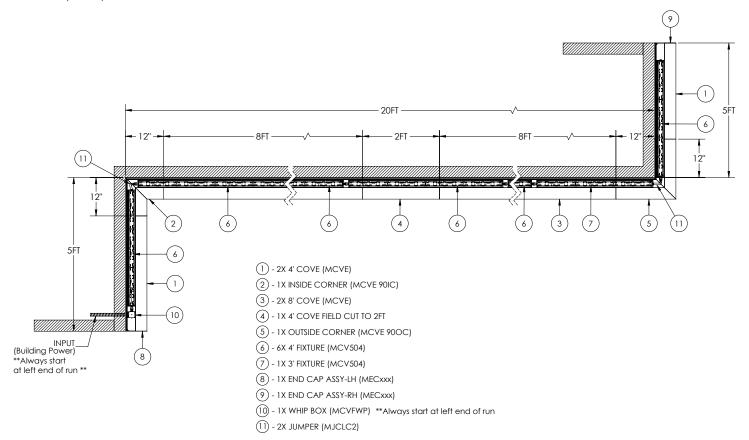
COORDINATED INSTALL WITH MCVE COVE EXTRUSION

Installation of MARKCOVE MCV504 Integrated Cove Luminaire



FULL SYSTEM COVE/LUMINAIRE CONFIGURATION

*Reference separate spec sheet and installation documents for additional MCVE Extrusion and MCV504 Luminaire details.





Integrated Cove Luminaire Static White & Color

SPECIFICATIONS

Housing

Extruded aluminum housing with fabricated steel gear tray and composite endcaps

Optic

Injection molded acrylic optic (ASYM) or injection molded clear acrylic diffuser (120X120DEG)

Finish

Polyester powder coat paint finish in Semi-Gloss White color for housing and gear tray. Composite endcaps are supplied in natural white material. Consult factory for custom colors or specify RAL colors from Architectural brochure.

Mounting

Mounts directly into MARKCOVE MCVE cove extrusion or on any flat surface via MCFMC fixed mount clip accessory

Source

Five LED lumen packages provided for five available color temperatures (2700K, 3000K, 3500K, 4000K, and 5000K) in two CRI (80 or 90) options – LED color variation no greater than a 1.5 MacAdam ellipse from board-to-board. Also available in four available static colors: RED (623nm), GREEN (528nm), BLUE (470nm), and AMBER (590nm).

LED Life

LED light engine — consisting of linear LED boards of 12 LEDs per 12 inches Static white LEDs are rated for 80,000 hours (L80) at +25° C ambient temperature. The color LEDs are rated for 120,000 hours (L70) at +25°C ambient temperature.

Voltage

120 through 277v in 50 to 60Hz; 347v available with supplied remote transformer

Controls and System Networking Options

Optional integrated nLight* controls make each run addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors, and photocontrols. Connection to nLight is simple. It can be accomplished with remote nLight AIR wireless or through standard Cat-5 cabling. (cabling "by others") nLight offers unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission, while nLight AIR is commissioned easily through an intuitive mobile app.

Dimming Driver

eldoLED® driver provides smooth, continuous, flickerfree dimming to dark <1%. THD: < 20%. Insignificant inrush current at 120 and 277VAC. FCC Class A and B tested for EMI and RFI. Driver will be set for Linear dimming curve.

Other dimming selections, O-10V, DALI, ELV, and Lutron high-performance driver options, also available.

Environment

Suitable for dry or damp location

Certification

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

Compliance

Buy American Act compliant

Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS.

Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America,

Buy America Act.

Please refer to <u>www.acuitybrands.com/buy-american</u> for additional information.

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. 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.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight* control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitvbrands.com/aplus.

*See ordering tree for details