

MESA

Mechanical-Electrical-
Security-Audio



Product Overview

MESA is a configurable trough housing unit that refines system functionality and the aesthetics of your ceiling. You select the mechanical, electrical, security or audio components you need. We then configure modules to beautifully integrate each component. Beautiful, sensible, clean and streamlined, MESA is easily serviced from below the ceiling. MESA. Systems, unified. Access, optimized. Looks, modernized.

Product Overview

Type: Recessed (Gyp or Grid)
Modules: Linear Ambient, Point Source, HVAC, Sprinkler, Speaker, Camera, Sensor, and Duplex Receptacle
Color Temp: 2700K, 3000K, 3500K, 4000K
CRI: 83 or 90+ typ.
Dimming: TRIAC & ELV (120/277VAC) - 5% Dim
Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black (120/277VAC)
0-10V (120/277VAC) - 1% Dim
DALI (120/277VAC) - 1% Dim

PROJECT:

TYPE:

Fixture Summary (see following pages for more information)

Performance Charts

PSLM-HHP				
Watts	Delivered Lumens	LPW	CBCP	Color Temp
11	972	88	8,673	3000K-83
16	1,205	75	10,749	3000K-83
18	1,369	76	12,215	3000K-83

Data is based on 3000K-83, 120V IES files available on website. Data is per head and based on Spot optic. See pg 7 for other beam spreads.

LALM			
Watts per Foot	Delivered Lumens	LPW	Color Temp
5	2,077	103.4	3500K-83
10	3,671	96.7	3500K-83

Data is based on 3500K-83 120V IES files available on website. Data is based on 4' fixture with Designer Lens

Electrical Data

PSLM1/PSLM2/PSLM1PD						
	11W		16W		18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	11	0.09	16	0.13	18	0.15
277V	11	0.04	16	0.06	18	0.07

Electronic constant current LED driver. Data per head

LALM			
Wattage Per Foot	4'		
		System Watts	Amps
5	120V	22.3	0.18
	277V	22.9	0.09
10	120V	42.1	0.30
	277V	41.5	0.15

Electronic multi-volt (120V-277V), constant current LED driver

PROJECT:

TYPE:

Final nomenclature for ordering purposes to be determined after reception and review of the ceiling plans.

Step 1: Housing Ordering Information

1	2	3	4	5	6
1 <u>Model</u> MESA-HSG-GB - MESA housing, gyp board MESA-HSG-GRID - MESA housing, grid ceiling	2 <u>Run Length</u> _____	3 <u>Configuration</u> IND - individual fixture, 2' to 8' in 1' increments CON - continuous run > than 8', specify to nearest foot CUS - custom made to measure, +/- 1/8" of customer supplied field dimensions PAT - pattern, consult factory	4 <u>Voltage</u> 120 120/277	5 <u>Finish</u> MB - matte black	6 <u>Faceplate</u> (finish matches fixture finish) PERF - perforated steel panel SOLID - solid steel panel

Step 2: Ordering Information for Point Source Light Module

1	2	3	4	5	6	7																
1 <u>Quantity</u> _____ (specify quantity)	2 <u>Model</u> PSLM1-HHP - point source 1 head adjustable light module, 6" PSLM2-HHP - point source 2 head adjustable light module, 12" PSLM1PD-HHP - point source 1 head pull-down adjustable light module, 6"	3 <u>Wattage</u> 11 16 18	4 <u>Beam Spreads</u> <table><tr><td>1LT</td><td>2LT</td></tr><tr><td>SP (15°)</td><td>SP (15°)</td></tr><tr><td>NF (22°)</td><td>NF (22°)</td></tr><tr><td>MFL (25°)</td><td>MFL (25°)</td></tr><tr><td>FL (28°)</td><td>FL (28°)</td></tr><tr><td>WF (45°)</td><td>WF (45°)</td></tr><tr><td>VWF (60°)</td><td>VWF (60°)</td></tr><tr><td>LS (60° x 10°)</td><td>LS (60° x 10°)</td></tr></table>	1LT	2LT	SP (15°)	SP (15°)	NF (22°)	NF (22°)	MFL (25°)	MFL (25°)	FL (28°)	FL (28°)	WF (45°)	WF (45°)	VWF (60°)	VWF (60°)	LS (60° x 10°)	LS (60° x 10°)	5 <u>Color Temp</u> 83 CRI: 27 - 2700K-83 30 - 3000K-83 35 - 3500K-83 40 - 4000K-83 90+ CRI: 229* - 2200K-90+ CRISP* - CrispWhite 279 - 2700K-90+ 3CLA - 3K Class A 309 - 3000K-90+ 359 - 3500K-90+ 409 - 4000K-90+ * Not available for 18W	6 <u>Driver</u> (for non-dimming select LE/TE option) LE/TE - TRIAC/ELV dimming, 5% dim (std) HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black 0-10V - 0-10V dimming; 1% dim DALI - EldoLED; 1% dim	7 <u>Options/Accessories</u> SNAH - snoot accessory holder, 1" length, matte black interior, exterior finish matches fixture finish, accepts cross blade plus 2 additional forms of media AH - accessory holder, finish matches fixture finish, accepts 2 forms of media HEX - hexocell louver, 1/8" x 1/8" (requires SNAH or AH) CB - cross blade, matte black finish (requires SNAH) SOL - solite lens (requires AH or SNAH)
1LT	2LT																					
SP (15°)	SP (15°)																					
NF (22°)	NF (22°)																					
MFL (25°)	MFL (25°)																					
FL (28°)	FL (28°)																					
WF (45°)	WF (45°)																					
VWF (60°)	VWF (60°)																					
LS (60° x 10°)	LS (60° x 10°)																					

PROJECT:

TYPE:

Final nomenclature for ordering purposes to be determined after reception and review of the ceiling plans.

Step 3: Ordering Information for Linear Ambient Light Module

LALM							
1	2	3	4	5	6	7	8
1 <u>Quantity</u> _____ (specify quantity)						6 <u>Length</u> 2 - 2' 3 - 3' 4 - 4'	
2 <u>Model</u> LALM - linear ambient light module						7 <u>Drivers</u> 0-10V - 1% electronic dimming, multi-volt (120V-277V) constant current driver (standard). HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black DALI - DALI Dimming 120-277VAC, 1% dim	
3 <u>Optics</u> DL - designer lens PL - performance lens						8 <u>Options/Accessories</u> EMC-PF - emergency circuit requires power feed located in last fixture section (for other locations consult factory) EMB - emergency battery pack (not available for lengths under 4')	
4 <u>Wattage</u> (per foot) 3* - 3W/ft 4* - 4W/ft 5 - 5W/ft 6 - 6W/ft 7 - 7W/ft 8 - 8W/ft 9 - 9W/ft 10 - 10W/ft * 4' minimum length required							
5 <u>Color Temp</u> 83 CRI: 27 - 2700K-83 30 - 3000K-83 35 - 3500K-83 40 - 4000K-83 90+ CRI: 279 - 2700K-90+ 309 - 3000K-90+ 359 - 3500K-90+ 409 - 4000K-90+							

Step 4: Ordering Information for Accessory Modules

1	2
1 <u>Quantity</u> _____ (specify quantity)	
2 <u>Model</u> SPR - sprinkler module, 6" HVAC____ - HVAC module, 18"/24"/36"/48" SPK - speaker module, 6" CAM - camera module, 6" MS - motion sensor module, 6" DPX - duplex receptacle module, 6" AMBC - general accessory mounting bracket/cover, 6" BL____ - blank module (specify length)	

PROJECT:

TYPE:

Specifications - MESA Housing

Application

Complete system of mechanical, electrical, security and audio components combined in one fixture for retail, commercial and hospitality environments

Construction

Extruded aluminum & heavy gauge steel frame

Electrical

120/277VAC input

Finish

White Texture, Black Texture or Matte Black finishes

Mounting

Housing mounted in gypsum board or grid ceilings (9/16" Tee or Slot Grid, or 15/16" Tee Grid)
Installation and ceiling trim spackled by installing contractor.

Certifications

Indoor use only

Light and Other Modules

Accepts a variety of Amerlux lighting modules and other modules (ie. duplex, camera, sensor, hvac, etc...) See page 8

HVAC module is compatible with the following Titus part numbers:

TITUS 18" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-18-2HP-08-2B-BLACK-0-XX-0
- DIFFUSER: ML38-18-2-XX-2B-BLACK-0-0-0

TITUS 24" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-24-2HP-08-2B-BLACK-0-XX-0
- DIFFUSER: ML38-24-2-XX-2B-BLACK-0-0-0

TITUS 36" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-36-2HP-08-2B-BLACK-0-XX-0
- PLENUM BOX: MPI38-36-2HP-10-2B-BLACK-0-XX-0
- DIFFUSER: ML38-36-2-XX-2B-BLACK-0-0-0

Consult factory for any other compatibility.

Specifications - Point Source Light Module

Application

Lighting module for MESA system of mechanical, electrical, security and audio components combined in one fixture for retail, commercial and hospitality environments

Construction

Thermally protected (adds 2W to total fixture wattage)
Steel driver housing
Steel upper housing and laser cut trim ring
Complete die-cast optical head construction
No exposed wiring

Optical

Tilt: 0-180° (pull-down module)
Rotation: 120° (pull-down module)
Beam Spreads: Spot, 15°; Narrow Flood, 22°;
Medium Flood, 25°; Flood, 28°; Wide Flood, 45°;
Very Wide Flood, 60°; Linear Spread, 60° x 10°

LED

Color Temp Options: 2200K, 2700K, 3000K, 3500K, 4000K
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite* LED available, 16W max
Class A** 3000K (high CRI, high gamut) available
R9 Values: 11 (83 CRI), 55 (92 CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

* *CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.*

** *Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.*

Electrical

Wattage: 11, 16, 18

Electronic constant current LED driver, 120/277VAC input

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Drivers

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron and DALI systems also available
See pages 13-14 for more dimming information

Finish

Powder coat paint
Consult Factory for custom finishes

Certifications

CSA listed to UL standards. Suitable for damp locations
Indoor use only

Warranty

5 year limited warranty

PROJECT:

TYPE:

Specifications - Linear Ambient Lighting Module

Application

Lighting module for MESA system of mechanical, electrical, security and audio components combined in one fixture for retail, commercial and hospitality environments

Construction

Heavy gauge steel upper housing is secured to aluminum extruded trim rails. Die-formed, cold-rolled steel internal components and external mounting brackets.

Optical

All lenses are lay-in, extruded acrylic. Amerlux's proprietary acrylic lens provide excellent transmission while effectively concealing source image.

DL - Designer Lens provides flat even glow on lens. Best when lens is in direct or constant view.

PL - Performance Lens provides high efficiency with some control and brightness

LED

Amerlux's boards and patented connector design with brand name LEDs enables Amerlux fixtures to have excellent thermal management and offer a 5 year warranty. Our LED binning is within 3 MacAdam ellipse. Boards are configured for maximum flexibility resulting in even illumination no matter the fixture layout. LED boards are easily replaced in the field with just a Phillips screw driver.

Color Temperature Options:

2700K, 3000K, 3500K, 4000K

CRI: 83 typical, 92 optional - consult factory

R9: 16 @ CRI 83

R9: >50 @ CRI 92

Life: 50,000+ hr., > 70% of initial lumens (L70)

Electrical

Wiring: Supply wires are easily accessible through access plate on top of fixture.

Wattage: 3W/ft, 4W/ft, 5W/ft, 10W/ft, 6W/ft, 7W/ft, 8W/ft, 9W/ft, 10W/ft (3W & 4W have a minimum length of 4'). For other wattages consult factory.

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Drivers

0-10V - 1% electronic dimming, multi-volt (120-277VAC) constant current driver (standard). Cap leads for non-dim applications.

Optional Drivers:

HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black

DALI - DALI Dimming 120-277VAC, 1% dim

Finish

Baked on finish for maximum durability and color stability. White Texture, Black Texture and Matte Black available.

Lengths

2, 3, and 4 foot lengths available.

Mounting

Gypsum board or Grid Ceiling mounting.
9/16" and 15/16" Tee Grid or 9/16" Slot Grid.

Certifications

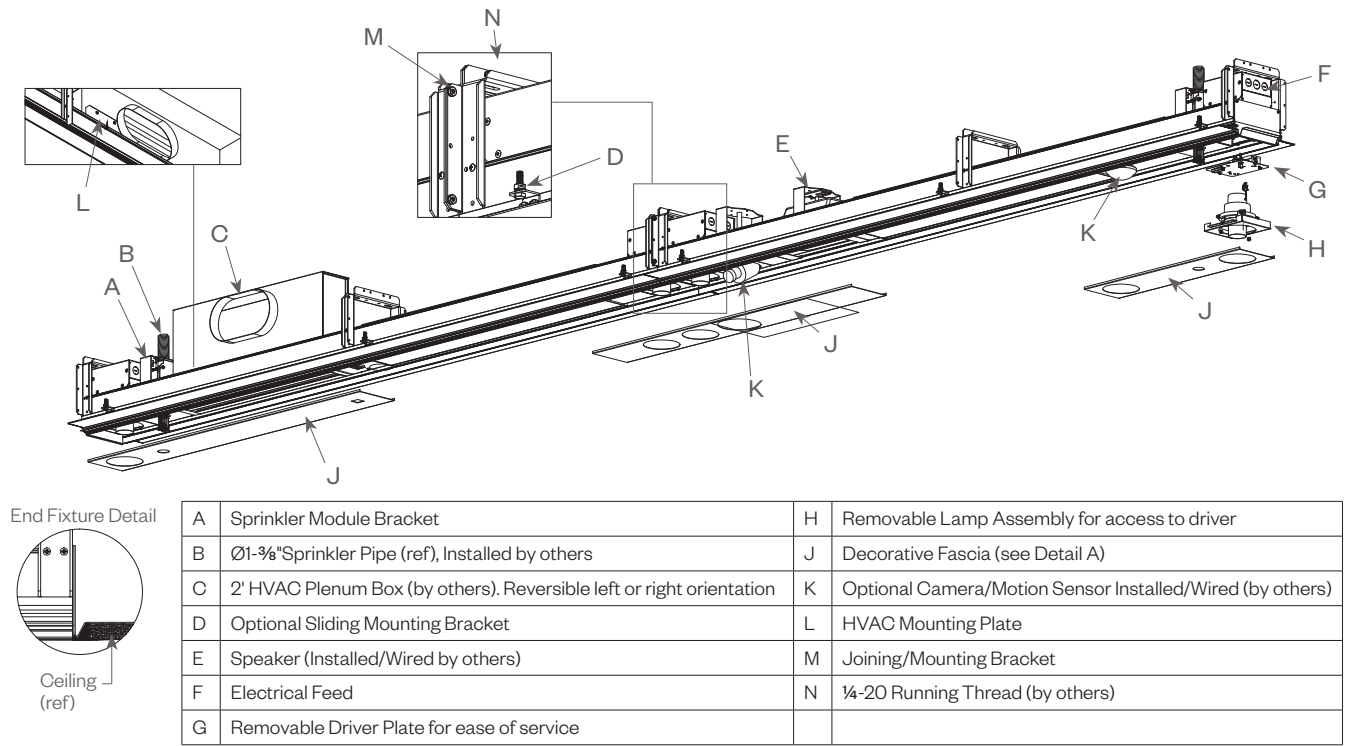
Approved to UL standards for damp locations as tested by CSA Intended for indoor use only

Warranty

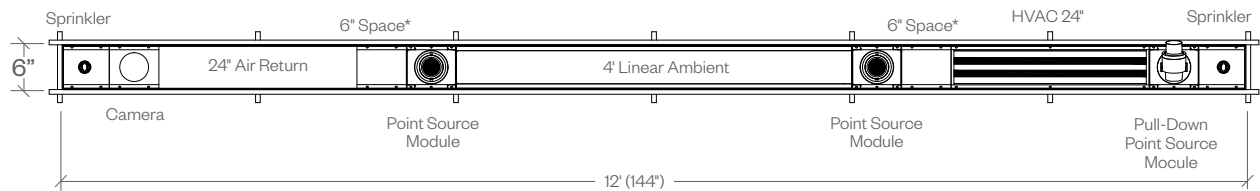
Amerlux's 5 year limited warranty. Please consult Amerlux website for details.

PROJECT:

TYPE:

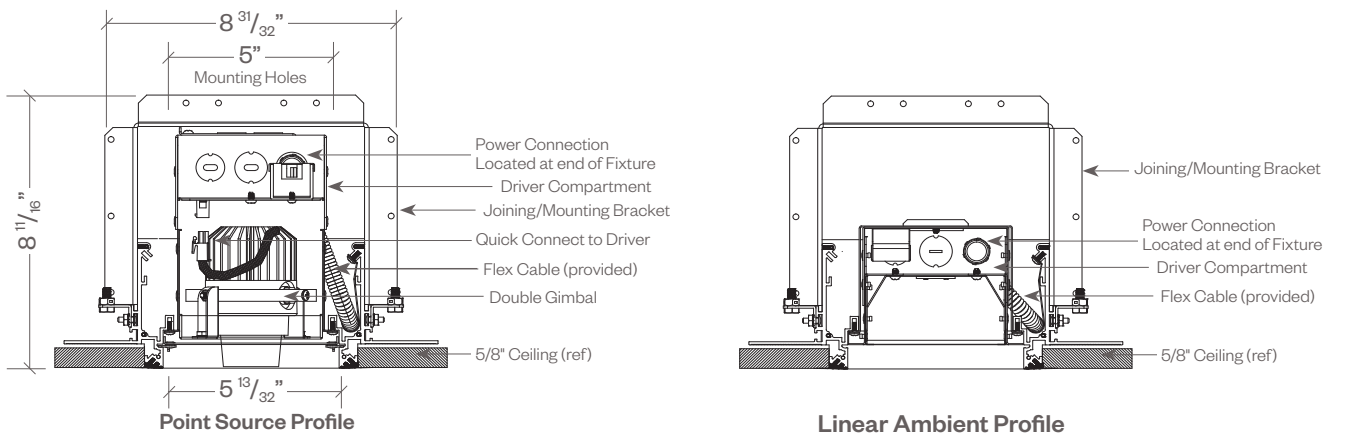


Example Pattern



* 6" Space can be utilized by the following accessories: Camera, Speaker, Motion Sensor, or Duplex.

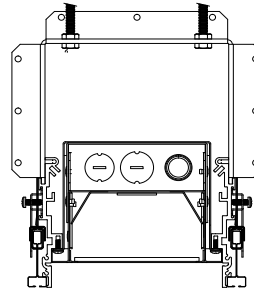
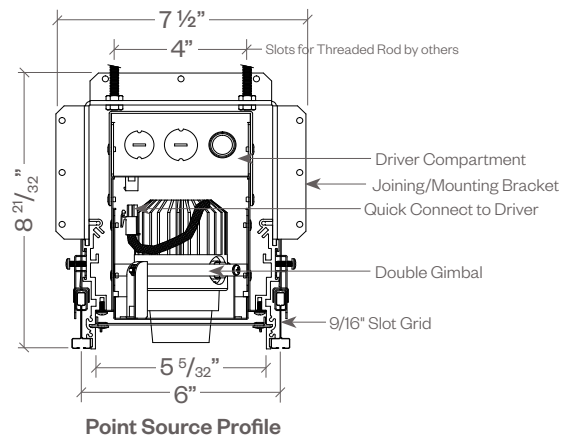
MESA-GB



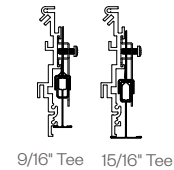
PROJECT:

TYPE:

MESA-GRID

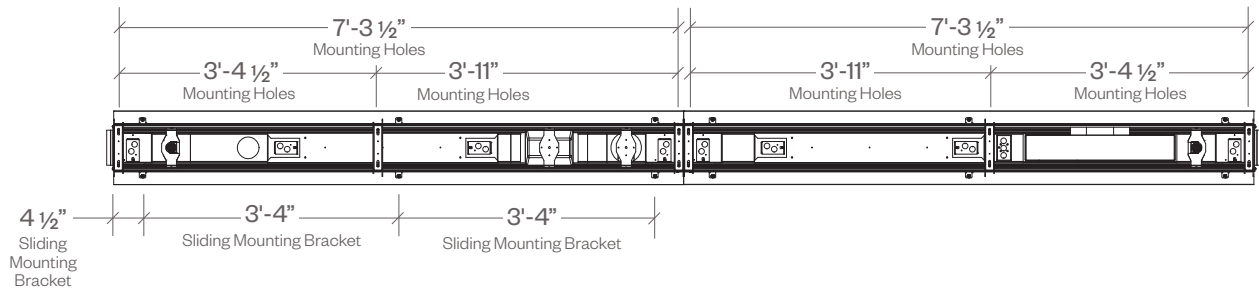


Linear Ambient Profile

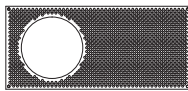


Note: Fixture MUST be suspended from structure due to weight. Fixture is too heavy to rest on grid.

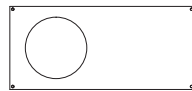
Mounting Spacing



Decorative Fascia



Perforated Steel Panel

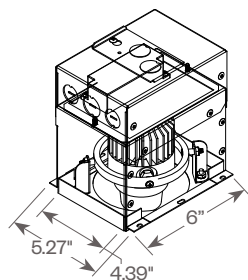


Solid Steel Panel

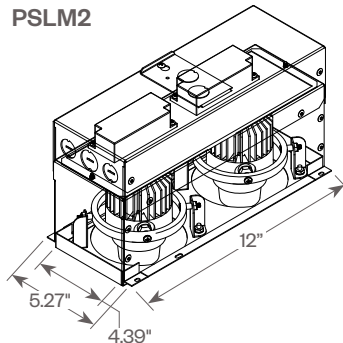
Note: HVAC & Speakers have option for PERF to be placed over top (39% of area is open with PERF design), or cut-out for those sections

Lighting Modules - Point Source

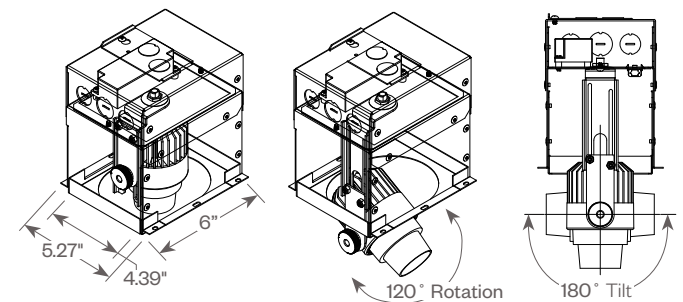
PSLM1



PSLM2



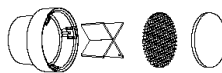
PSLM1PD



Accessories (diagrams show installation order)

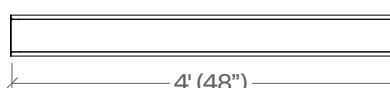
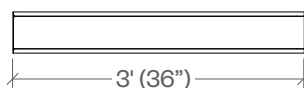
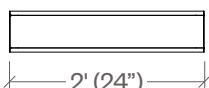


Accessory holder, hexcell louver, solite lens



Snoot accessory holder, cross blade, hexcell louver, solite lens

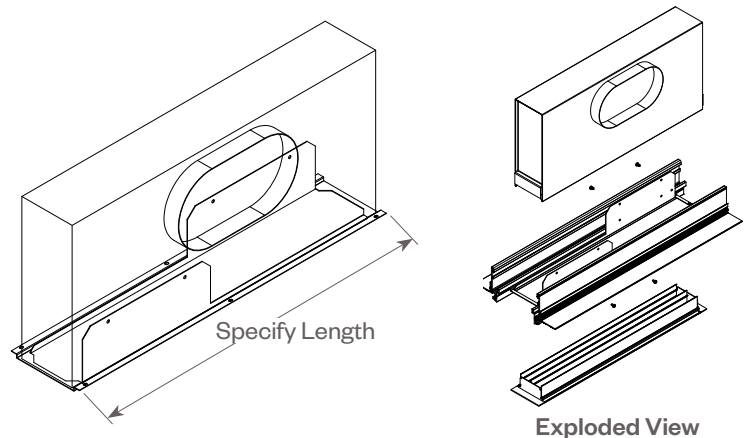
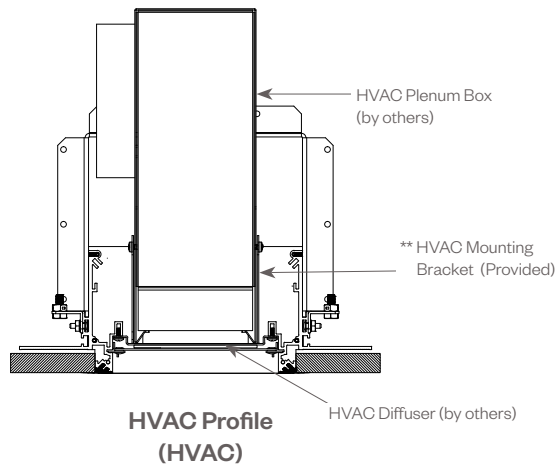
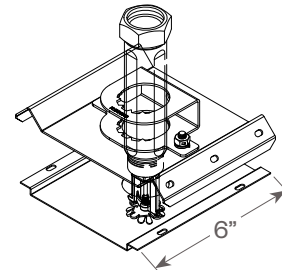
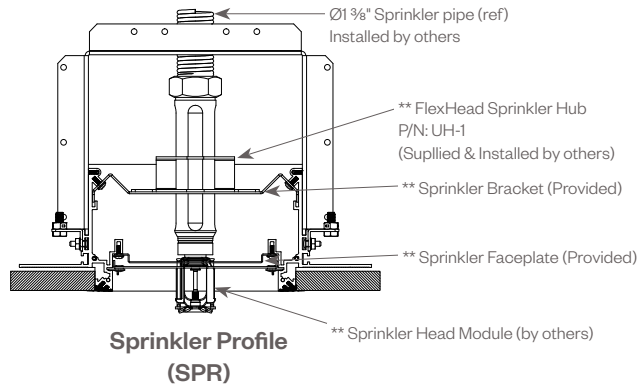
Lighting Modules - Linear Ambient Lengths



PROJECT:

TYPE:

Accessory Brackets/Faceplates



HVAC module is compatible with the following Titus part numbers:

TITUS 18" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-18-2HP-08-2B-BLACK-0-XX-0
- DIFFUSER: ML38-18-2-XX-2B-BLACK-0-0-0

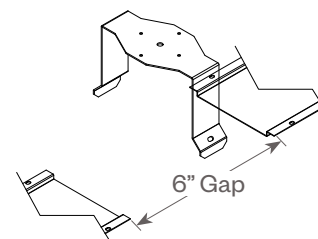
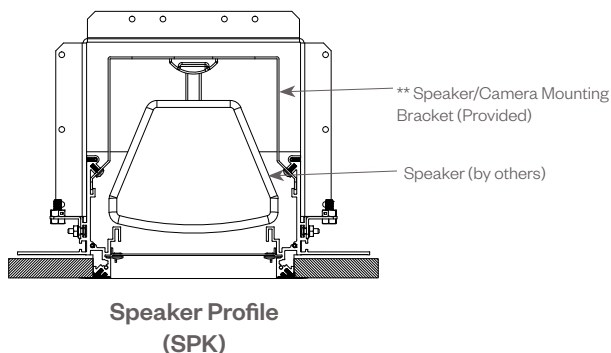
TITUS 24" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-24-2HP-08-2B-BLACK-0-XX-0
- DIFFUSER: ML38-24-2-XX-2B-BLACK-0-0-0

TITUS 36" AIR HANDLING ASSEMBLY

- PLENUM BOX: MPI38-36-2HP-08-2B-BLACK-0-XX-0
- PLENUM BOX: MPI38-36-2HP-10-2B-BLACK-0-XX-0
- DIFFUSER: ML38-36-2-XX-2B-BLACK-0-0-0

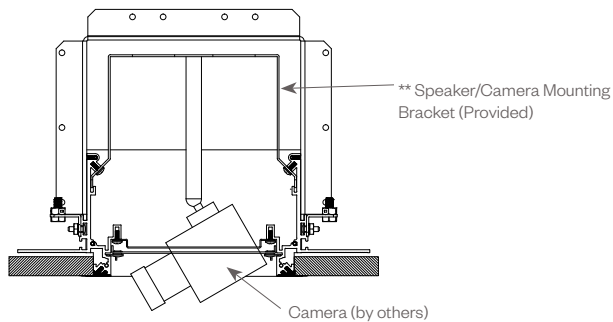
Consult factory for any other compatibility.



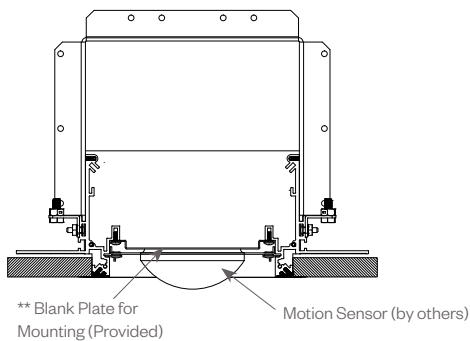
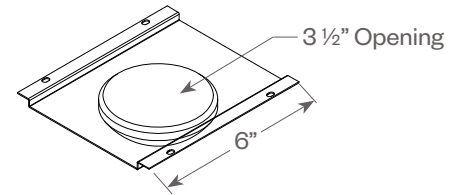
** All accessory mounting brackets are supplied for the installers convenience. It is the architects/contractors responsibility to make sure that all accessory brackets meet their respective codes and are installed in accordance with all local, fire and building codes.

PROJECT:

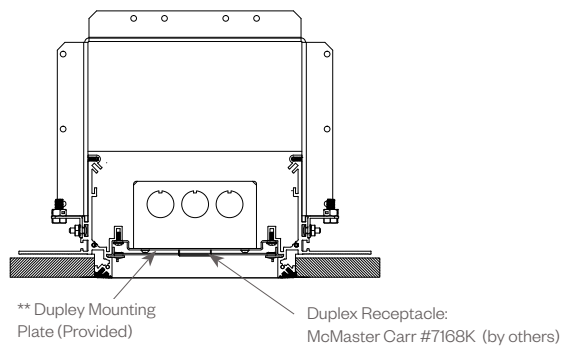
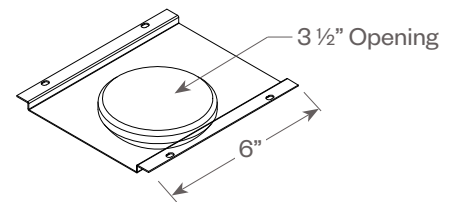
TYPE:



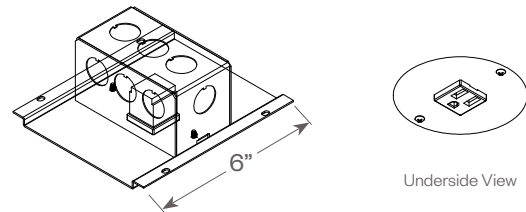
Camera Profile (CAM)



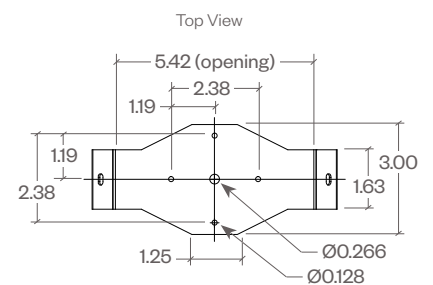
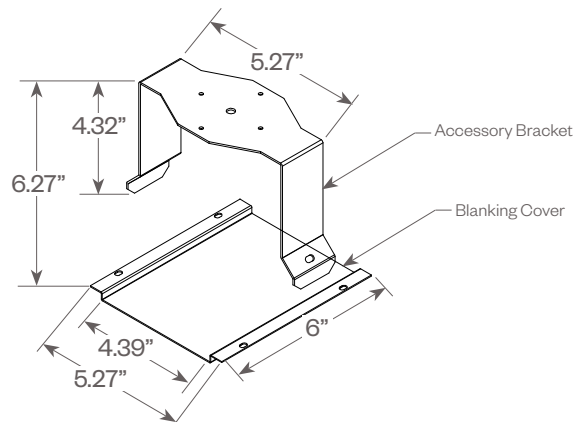
Motion Sensor Profile (MS)



Duplex Profile (DPX)



Accessory Mounting Bracket/Cover Profile (AMBC)



** All accessory mounting brackets are supplied for the installers convenience. It is the architects/contractors responsibility to make sure that all accessory brackets meet their respective codes and are installed in accordance with all local, fire and building codes.

PROJECT:

TYPE:

PSLM - FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

Wattage:	11W	16W	18W
Factor:	0.71	0.88	1.0

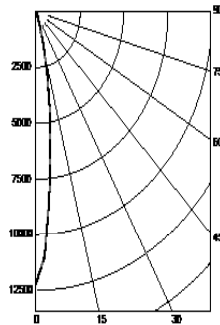
	83 CRI	90+ CRI
R9 Value:	11	55

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.71	0.80	0.83	0.87	0.90	0.65	0.75

18W LED, 3000K-83

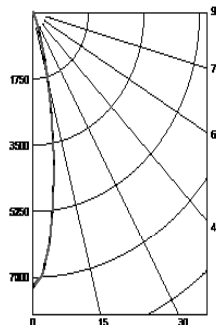
Spot (SP) Distribution, 15°
LTL #855377
Lumens: 1,369



Candelas at Nadir

Deg	Candela
0	12215
5	8436
15	1705
25	204
35	77
45	26

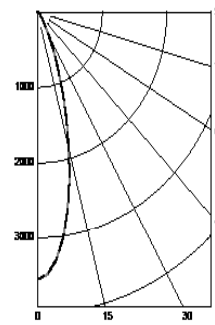
Narrow Flood (NF) Distribution, 22°
LTL #860527
Lumens: 1,307



Candelas at Nadir

Deg	Candela
0	7252
5	6128
15	1841
25	309
35	93
45	41

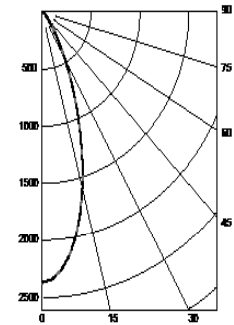
Flood (FL) Distribution, 28°
LTL # 860528
Lumens: 1,285



Candelas at Nadir

Deg	Candela
0	3551
5	3304
15	1861
25	612
35	156
45	57

Wide Flood (WF) Distribution, 45°
LTL # 860529
Lumens: 1,278



Candelas at Nadir

Deg	Candela
0	2369
5	2268
15	1592
25	754
35	251
45	82

Application Data:

Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

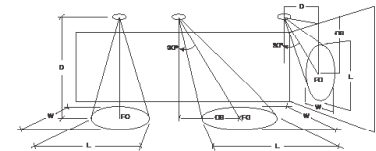
D=Distance to floor or wall.

FC=Footcandles on floor or wall at center beam aiming location.

L=Effective Visual Beam length in feet (50% of maximum footcandle level).

W=Effective Visual Beam width in feet (50% of maximum footcandle level).

CB=Distance across or down to center beam location.



	0° Aiming Angle Horizontal Footcandles	30° Aiming Angle Horizontal Footcandles	30° Aiming Angle Vertical Footcandles	60° Aiming Angle Vertical Footcandles
Spot	D FC L W	D FC L W CB	D FC L W CB	D FC L W CB
	5.0' 484 1.4 1.4	5.0' 313 1.8 1.5 3.0	3.0' 178 3.0 1.6 5.0	3.0' 630 1.6 1.1 2.0
	7.5' 216 2.0 2.0	7.5' 136 2.8 2.4 4.0	4.0' 105 3.8 2.1 6.0	4.0' 450 1.6 1.3 2.0
	10.0' 122 2.7 2.7	10.0' 76 3.7 3.2 6.0	5.0' 67 4.8 2.7 8.0	5.0' 298 2.0 1.6 3.0
	12.5' 78 3.4 3.4	12.5' 46 4.8 4.2 7.0	6.0' 47 5.9 3.2 9.0	6.0' 200 2.4 1.9 3.0
Narrow Flood	D FC L W	D FC L W CB	D FC L W CB	D FC L W CB
	5.0' 289 1.7 1.7	5.0' 187 2.4 2.1 3.0	3.0' 127 3.3 1.8 4.0	3.0' 422 1.9 1.3 2.0
	7.5' 129 2.8 2.8	7.5' 86 3.5 3.1 4.0	4.0' 70 4.4 2.7 6.0	4.0' 298 1.9 1.5 2.0
	10.0' 73 3.6 3.6	10.0' 47 4.7 4.1 5.0	5.0' 47 5.3 3.2 7.0	5.0' 181 2.5 2.1 3.0
	12.5' 47 4.5 4.5	12.5' 31 5.8 5.2 7.0	6.0' 32 6.7 3.9 8.0	6.0' 133 2.8 2.5 3.0
Flood	D FC L W	D FC L W CB	D FC L W CB	D FC L W CB
	5.0' 142 2.7 2.7	5.0' 92 3.4 3.1 3.0	3.0' 75 3.8 2.7 4.0	3.0' 232 2.3 1.7 2.0
	7.5' 63 3.9 3.9	7.5' 43 4.9 4.4 4.0	4.0' 44 4.9 3.3 5.0	4.0' 154 2.7 2.4 2.0
	10.0' 36 5.2 5.2	10.0' 25 6.4 5.8 5.0	5.0' 29 6.1 4.1 6.0	5.0' 95 3.4 3.0 2.0
	12.5' 23 6.5 6.5	12.5' 16 8.0 7.2 6.0	6.0' 20 7.4 5.1 7.0	6.0' 69 3.8 3.5 3.0
Wide Flood	D FC L W	D FC L W CB	D FC L W CB	D FC L W CB
	5.0' 95 3.2 3.2	5.0' 67 3.9 3.4 2.0	3.0' 63 3.7 2.8 3.0	3.0' 180 2.4 2.0 1.0
	7.5' 42 4.8 4.8	7.5' 30 5.7 5.3 3.0	4.0' 36 4.9 3.7 4.0	4.0' 105 3.2 2.9 2.0
	10.0' 24 6.4 6.4	10.0' 17 7.6 7.1 4.0	5.0' 23 6.1 4.8 5.0	5.0' 69 3.8 3.5 2.0
	12.5' 15 8.0 8.0	12.5' 11 9.6 8.9 5.0	6.0' 16 7.5 5.7 6.0	6.0' 47 4.7 4.3 3.0

PROJECT:

TYPE:

LALM - FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-83 120V IES file on website)

Wattage:	3W	4W	5W	6W	7W	8W	9W
Factor:	0.63	0.82	1.0	1.17	1.34	1.50	1.64

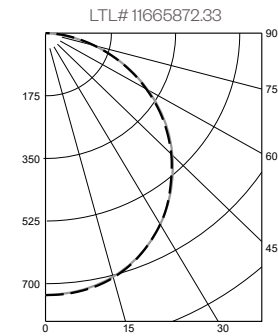
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.87	0.93	1.0	1.08

6" DESIGNER LENS 5W 3500K 4FT

Total Watts: 20

Total Lumens: 2,077

Source: 120 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	931	44.8
0-60	1636	78.8
0-90	2077	100.0
90-180	0	0.0

Luminaire Efficacy = 103.4 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RW				
RCR				
0	2415	2415	2415	2415
1	2201	2110	2028	1954
2	1997	1839	1708	1596
3	1817	1616	1457	1330
4	1663	1432	1261	1128
5	1529	1281	1104	972
6	1412	1154	977	849
7	1310	1047	874	750
8	1221	957	787	669
9	1141	879	715	603
10	1071	812	653	546

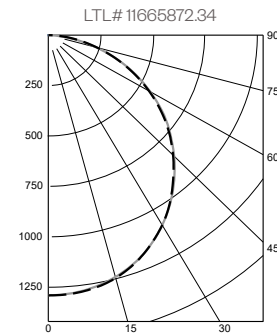
Note: Values expressed as Lumens delivered to the task surface.

6" DESIGNER LENS 10W 3500K 4FT

Total Watts: 38

Total Lumens: 3,671

Source: 120 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1641	44.7
0-60	2888	78.7
0-90	3671	100.0
90-180	0	0.0

Luminaire Efficacy = 96.7 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RW				
RCR				
0	4268	4268	4268	4268
1	3888	3728	3584	3453
2	3527	3249	3017	2819
3	3211	2854	2573	2348
4	2937	2529	2226	1991
5	2701	2262	1949	1716
6	2495	2038	1725	1498
7	2314	1849	1542	1324
8	2156	1689	1389	1181
9	2016	1551	1261	1063
10	1892	1433	1153	964

Note: Values expressed as Lumens delivered to the task surface.

PROJECT:

TYPE:

LALM - FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-83 120V IES file on website)

Wattage:	3W	4W	5W	6W	7W	8W	9W
Factor:	0.63	0.82	1.0	1.17	1.34	1.50	1.64

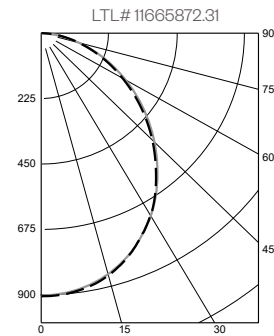
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.87	0.93	1.0	1.08

6" PERFORMANCE LENS 5W 3500K 4FT

Total Watts: 20

Total Lumens: 2,304

Source: 120 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1105	48.0
0-60	1865	80.9
0-90	2304	100.0
90-180	0	0.0

Luminaire Efficacy = 114.7 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RW				
RCR				
0	2679	2679	2679	2679
1	2450	2354	2266	2187
2	2232	2064	1923	1803
3	2039	1822	1652	1515
4	1871	1622	1437	1294
5	1724	1456	1265	1122
6	1596	1316	1125	986
7	1483	1197	1009	875
8	1383	1096	912	784
9	1295	1009	830	708
10	1216	933	760	644

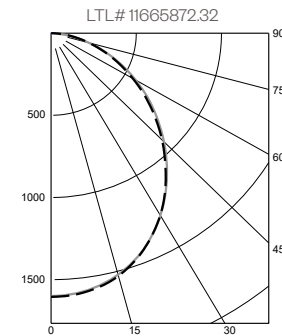
Note: Values expressed as Lumens delivered to the task surface.

6" PERFORMANCE LENS 10W 3500K 4FT

Total Watts: 38

Total Lumens: 4,079

Source: 120 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1956	48.0
0-60	3299	80.9
0-90	4079	100.0
90-180	0	0.0

Luminaire Efficacy = 107.5 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RW				
RCR				
0	4743	4743	4743	4743
1	4338	4167	40412	3872
2	3952	3653	3404	3192
3	3609	3225	2924	2681
4	3312	2872	2544	2291
5	3052	2577	2239	1987
6	2825	2330	1991	1745
7	2625	2120	1786	1549
8	2449	1940	1614	1388
9	2292	1786	1470	1253
10	2153	1652	1346	1140

Note: Values expressed as Lumens delivered to the task surface.

PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® MESA fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

TRIAC (Forward Phase) DIMMING (Standard)

Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

Notes:

- 120VAC or 277VAC*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

Compatible Dimmers†:

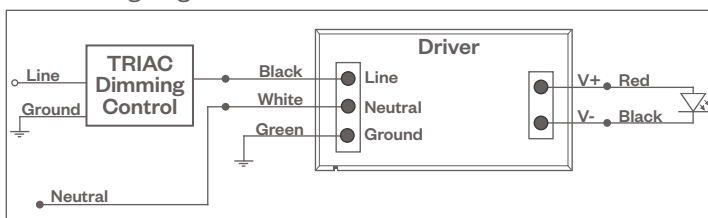
Wall Box (TRIAC 120VAC)

Lutron "Diva"
Lutron "Nova-T"
Lutron "Maestro"
Lutron "Skylark"

Central System

Lutron "GP" Panel
Lutron Grafik Eye QS

TRIAC Wiring Diagram



ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

- 120VAC or 277VAC*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

Compatible Dimmers†:

Wall Box (ELV 120VAC)

Lutron "Diva"
Lutron "Nova-T"
Lutron "Maestro"
Lutron "Skylark"
Leviton "Surslide"
Leviton "Vizio"

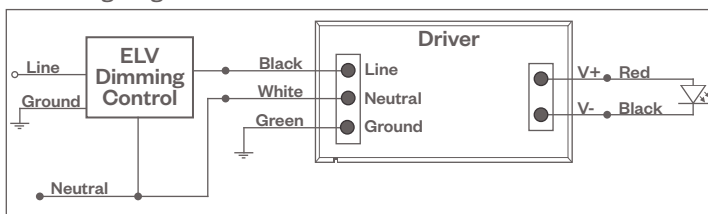
Wall Box (ELV 277VAC)

Leviton Revoir II AWSMT-E

Central System

Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron Grafik Eye QS with PHPM-PA 120/277VAC

ELV Wiring Diagram



Notes:

* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® CMT fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

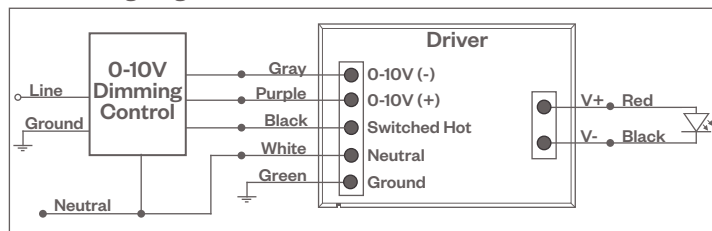
0-10V DIMMING

Integrates into a variety of building management and daylighting controls

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

0-10V Wiring Diagram



Compatible Dimmers†:

Wall Box

Lutron "Diva" - DVSTV | Leviton Renoir II 0-10V

Central System

Lutron Grafik Eye with GRX-TVI Interface

LUTRON LDE1 DIMMING

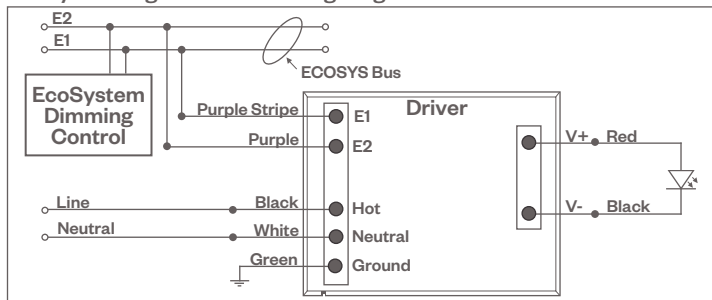
Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Lutron LDE1 (HILUME-H-ECO)

EcoSystem Digital Control Wiring Diagram



Compatible Dimmers†:

Lutron ECO System

Pow Pak Dimming Modules
Energi Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

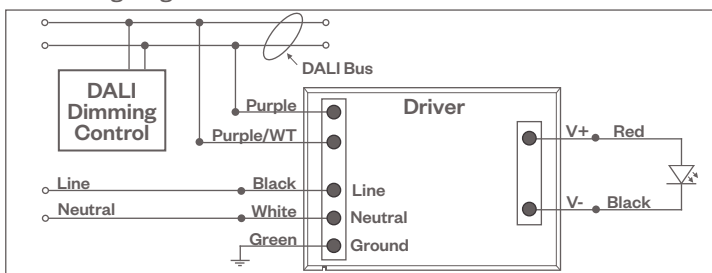
DALI DIMMING

Digital control protocol allows individual fixture control

Notes:

- 120VAC - 277VAC*
- Dims down to 1% light output in most cases

DALI Wiring Diagram



Compatible Dimmers†:

Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

Central System

Dynalite
Fifth Light

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.