

Cylindrix® III

Recessed Multiples



Features

Cylindrix® III Recessed LED, the best combination of optical and thermal performance, aesthetics and visual comfort in an recessed accent. Features a deeply recessed single LED light source for enhanced visual comfort and control, integrated heat sink and high performance interchangeable reflector optics (for 15°/25°/40° beam spreads only). A 10° beam spread is also available but not interchangeable with the other beam options. 1, 2 and 3 light configurations available.

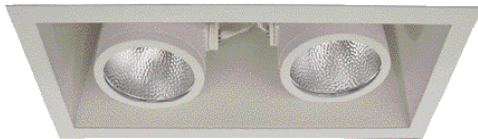
Product Overview

Type:	Recessed Multiple, Accent & Display
Wattage:	16, 19, 23, 27, 31
Lumen Output:	NSP: 2,426 lm; 79 lm/W FL: 3306 lm; 100.4 lm/W
CBCP:	13,460 (FL)
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2700K, 3000K) CrispWhite & Class A LED's available
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

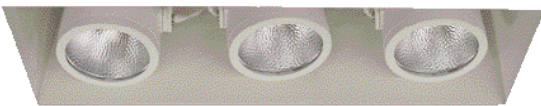


PROJECT:

TYPE:



2 Light



3 Light (Trimless version shown)

Fixture Summary *(see following pages for more information)*

Fixture Type

# of Heads	New Construction	Remodeler	Trim	Trimless
1	Yes	No	Yes	Yes
2	Yes	No	Yes	Yes
3	Yes	No	Yes	Yes

See separate spec sheet for Semi-Recessed version.

Performance Chart

Watts	Delivered Lumens	CBCP	Color Temp
16	1,700	6,921	3000K-83
19	2,018	8,332	3000K-83
23	2,440	9,934	3000K-83
27	2,880	11,726	3000K-83
31	3306	13,460	3000K-83

Data is based on 3000K-83 120v IES files available on website

Data is "per head" and based on Flood optics

See pg 7 for other beam spreads



PROJECT:

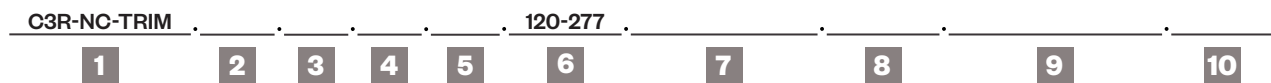
TYPE:

Frame Ordering Information



- | | |
|---|---|
| <p>1 <u>Model</u>
C3R/SR-NC-FRAME (new construction)</p> <p>2 <u>Style</u>
T - trimmed
TL - trimless</p> <p>3 <u># of Heads</u>
1
2
3</p> <p>4 <u>Voltage</u>
120
277</p> | <p>5 <u>Driver</u>
LE/TE - TRIAC/ELV dimming, 5% dim (standard)
HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black
0-10V - 0-10V dimming; 1% dim
DALI - EldoLED, 1% dim</p> <p>6 <u>Options/Accessories</u>
EM* - emergency battery pack, available on 2 or 3 light - powers only 1 head of the total fixture
<i>* If this option is selected, you must also select EM option in the Trim Ordering section.</i></p> |
|---|---|

Trim Ordering Information



- | | |
|--|---|
| <p>1 <u>Model</u>
C3R-NC-TRIM (new construction)</p> <p>2 <u>Style</u>
T - trimmed
TL - trimless</p> <p>3 <u># of Heads</u>
1
2
3</p> <p>4 <u>Wattage</u>
16
19
23
27
31</p> <p>5 <u>Finish (for housing, head & trim)</u>
WT - white texture
BT - black texture
ST - silver texture
<i>Other finishes, consult factory</i></p> <p>6 <u>Voltage</u>
120-277</p> <p>7 <u>Beam Spreads</u>
1LT 2LT 3LT
NSP* NSP* NSP* (narrow spot, 10°)
SP SP SP (spot, 15°)
FL FL FL (flood, 25°)
WF WF WF (wide flood, 40°)
LS LS LS (linear spread lens, 60°x10°)</p> | <p>8 <u>Color Temp</u>
83 CRI: 90+ CRI:
27 - 2700K-83 279 - 2700K-90+ CRISP+ - CrispWhite
30 - 3000K-83 309 - 3000K-90+ 3CLA+ - 3K Class A
35 - 3500K-83 359 - 3500K-90+
40 - 4000K-83 409 - 4000K-90+
<i>* Not available with NSP beam spread</i></p> <p>9 <u>Driver</u>
LE/TE - TRIAC/ELV dimming, 5% dim (standard)
HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black
0-10V - 0-10V dimming; 1% dim
DALI - EldoLED, 1% dim</p> <p>10 <u>Options/Accessories</u>
<i>(standard front door accepts 1 accessory)</i>
SN34 - snoot 3/4" length, exterior finish matches fixture finish; accepts up to 2 accessories
SN15 - snoot 1-1/2" length, exterior finish matches fixture finish; accepts up to 2 accessories
HEX - hexcell louver
CB - cross blade, matte black finish (requires snoot)
CL - clear glass lens
SOL - solite beam softening lens
EM* - emergency battery pack, available on 2 or 3 light - powers only 1 head of the total fixture
<i>* If this option is selected, you must also select EM option in the Frame Ordering section.</i></p> |
|--|---|

* Based on availability, lead times may vary, consult factory

PROJECT:

TYPE:

Specifications

Application

Retail and commercial accent and display lighting

Construction

Formed steel mounting frame with integral mounting bars
Thermally protected (adds 2W to total fixture wattage)
Steel driver housing
Steel upper housing and laser cut trim ring
Steel plaster frame (trimless only)
Complete die-cast optical head construction
Passive cooled

Optical

Tilt: 0-45°x45° (R), 0-25°x45° (RTLX)
Rotation: 360°+
Beam Spreads: Narrow Spot, 10°; Spot, 15°; Flood, 25°;
Wide Flood, 40°; Linear Spread Lens, 60° x 10°

LED

Color Temp Options:

2700K, 3000K, 3500K, 4000K, CRISP
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2700K, 3000K)
CrispWhite* available
Class A** LED available

R9 Values: 11 (83 CRI), 55 (90+ 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 similar to CMH sources. It creates impactful lighting 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: 16, 19, 23, 27, 31

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 & DALI systems also available
See pages 8-10 for more dimming information

Finish

Powder coat paint
Consult Factory for custom finishes

Mounting

Trimmed: For use in T-Grid or GB ceilings; max ceiling thickness 1"
Trimless: For use in GB ceilings; max ceiling thickness 5/8"
Adjustable hanger bars included (14 1/2" - 25" std.)
(32"-48" Adjustable hanger bars available)
Consult Factory for thicker ceilings

Certifications

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

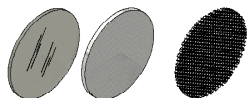
Warranty

5 year limited warranty

Emergency Battery Pack (EM)

Powers single head of 2, 3 or 4 light multiple at 5.1 watts (approx. 400 Lm) for 90 minutes. Not available on 1 light multiple

Accessories



Clear lens, Solite lens, Hexcell louver (fits in front door)



Snoot, 3/4" deep

Snoot, 1 1/2" deep



Linear spread lens, Hexcell louver, Cross blade (requires snoot)

PROJECT:

TYPE:

Electrical Data

NOTE: System Watts includes an additional 2W for thermal protector power consumption.

1 Light

	1 x 16W		1 x 19W		1 x 23W		1 x 27W		1 x 31W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	18	0.15	21	0.18	25	0.21	29	0.24	33	0.28
277V	18	0.06	21	0.08	25	0.09	29	0.10	33	0.12

Electronic constant current LED driver

2 Light

	2 x 16W		2 x 19W		2 x 23W		2 x 27W		2 x 31W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	36	0.30	42	0.35	50	0.42	58	0.48	66	0.55
277V	36	0.13	42	0.15	50	0.18	58	0.21	66	0.24

Electronic constant current LED driver

3 Light

	3 x 16W		3 x 19W		3 x 23W		3 x 27W		3 x 31W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	54	0.45	63	0.53	75	0.63	87	0.73	99	0.83
277V	54	0.19	63	0.23	75	0.27	87	0.31	99	0.36

Electronic constant current LED driver

Cylindrix® III

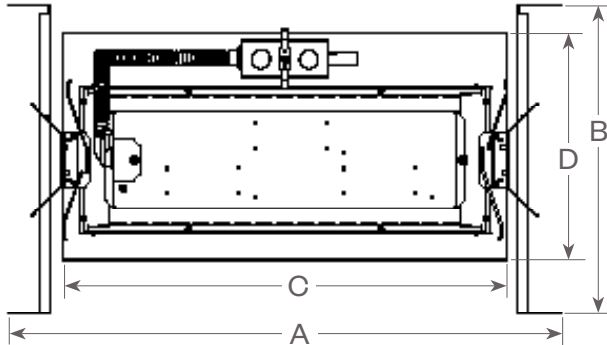
Recessed Multiples



PROJECT:

TYPE:

Cylindrix III Multiples: Recessed

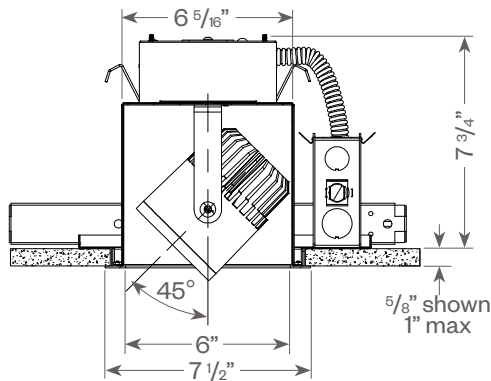


	1 Light	2 Light	3 Light
A	13 3/4"	20 1/4"	25 15/16"
B	14 1/2"	14 1/2"	14 1/2"
C	8 9/16"	15 1/16"	20 13/16"
D	10 11/16"	10 11/16"	10 11/16"

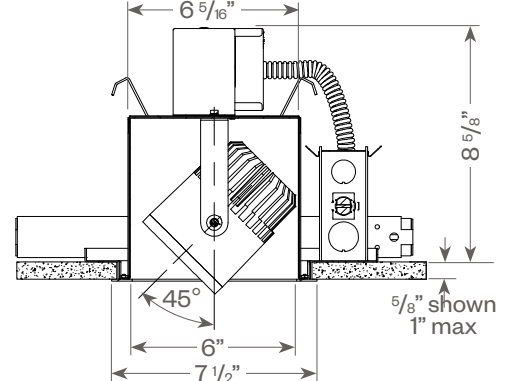
Ceiling cut out:
 1 Light - 7 1/8" x 7 1/8"
 2 Light - 7 1/8" x 13 5/8"
 3 Light - 7 1/8" x 19 5/16"

End View

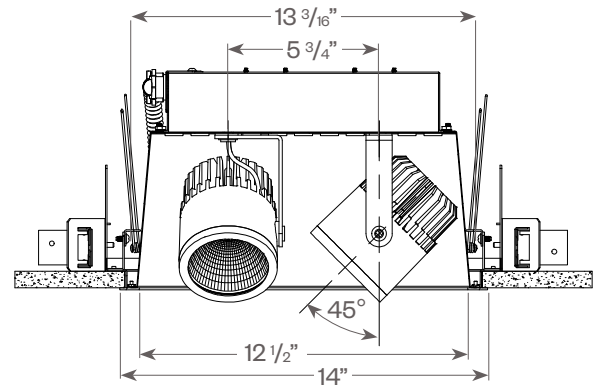
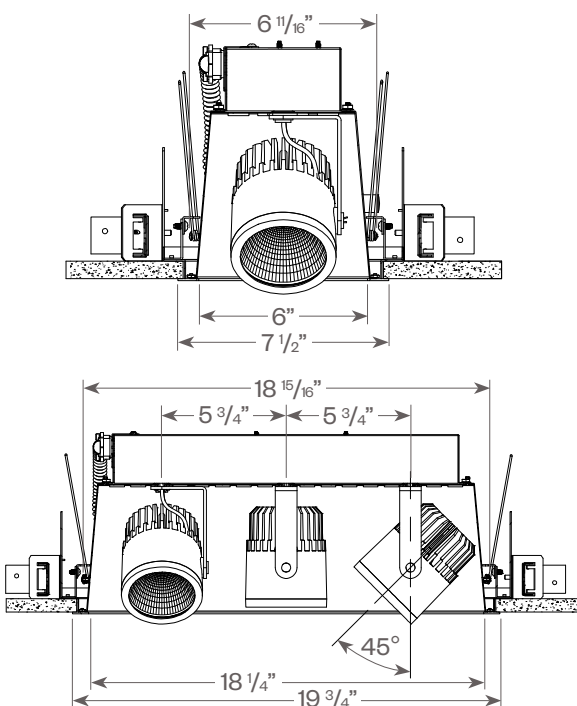
Standard Driver (ELV/TRIAC)



Hi-lume®/0-10V/DALI Driver



Side View



Cylindrix® III

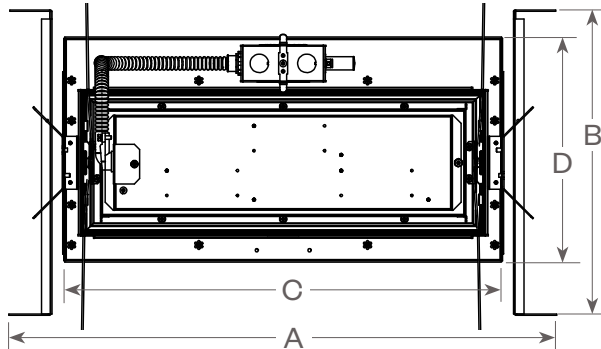
Recessed Multiples



PROJECT:

TYPE:

Cylindrix III Multiples: Recessed Trimless

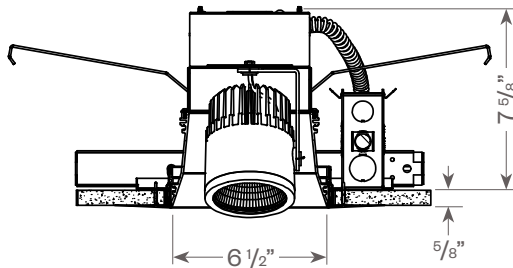


	1 Light	2 Light	3 Light
A	13 3/4"	20 1/4"	25 15/16"
B	14 1/2"	14 1/2"	14 1/2"
C	8 9/16"	15 1/16"	20 13/16"
D	10 11/16"	10 11/16"	10 11/16"

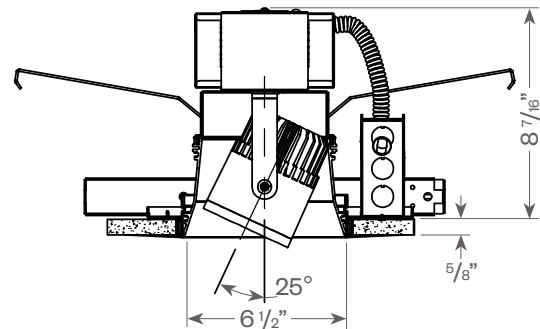
Ceiling cut out:
 1 Light - 7 1/8" x 7 1/8"
 2 Light - 7 1/8" x 13 5/8"
 3 Light - 7 1/8" x 19 5/16"

End View

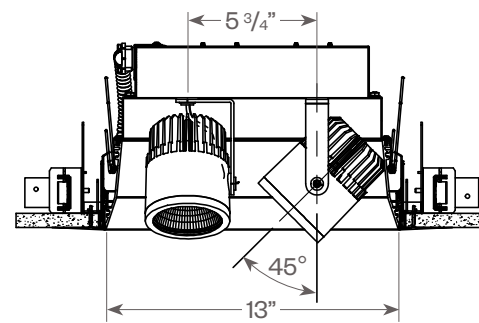
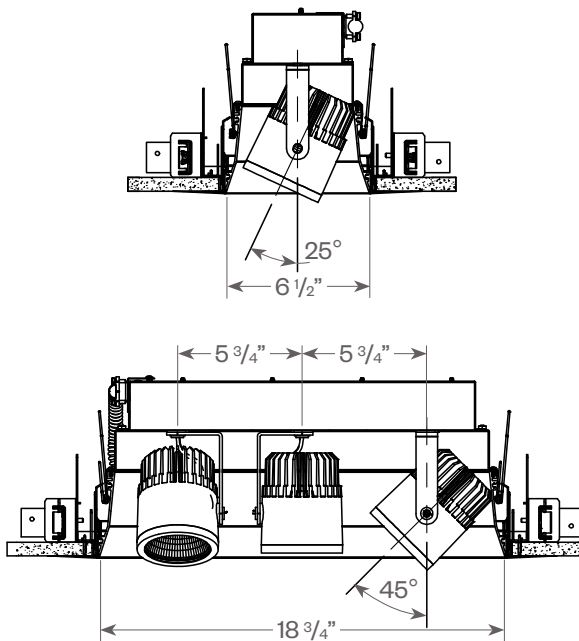
Standard Driver (ELV/TRIAC)



Hi-lume®/0-10V/DALI Driver

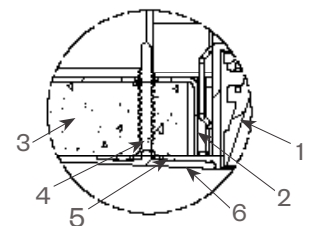


Side View



Plaster Frame Installation Detail (for trimless fixture only)

1. Recessed extruded housing
2. Aperture plate
3. Ceiling 5/8"
4. Drywall screw (by others)
5. Plaster frame
6. Plaster skim coat (by others)



PROJECT:

TYPE:

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

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

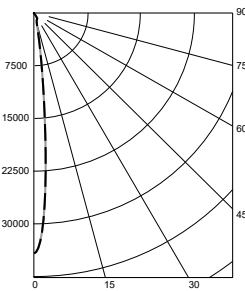
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

Wattage:	16W	19W	23W	27W	31W
Factor:	0.51	0.61	0.74	0.87	1.0

CCT:	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.83	0.86	0.90	0.93	0.65	0.70

31W LED, 3000K-83

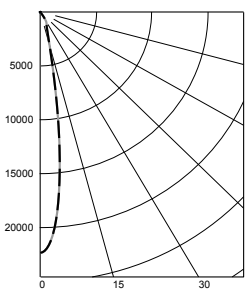
Narrow Spot (NSP), 10°
LTL #11906314.01A
Lumens: 2,426



Candelas at Nadir

Deg	Candela
0	34180
5	17580
15	1541
25	979
35	195
45	18

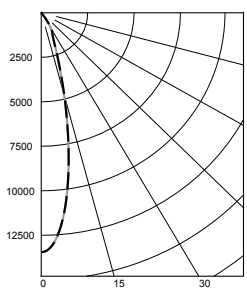
Spot (SP), 15°
LTL # 13609366.09
Lumens: 3264



Candelas at Nadir

Deg	Candela
0	22340
5	17770
15	3015
25	1305
35	383
45	27

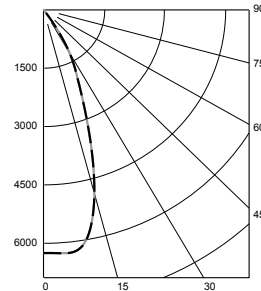
Flood (FL), 25°
LTL # 13609366.10
Lumens: 3306



Candelas at Nadir

Deg	Candela
0	13460
5	11970
15	4475
25	1407
35	378
45	28

Wide Flood (WF), 40°
LTL # 13609366.11
Lumens: 3257

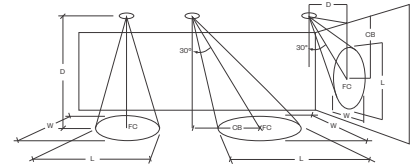


Candelas at Nadir

Deg	Candela
0	6252
5	6280
15	4839
25	2030
35	442
45	33

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				
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
NARROW SPOT	5.0'	1367	1.1	1.1	5.0'	839	1.3	1.1	3.0	3.0'	508	2.0	1.1	5.0	3.0'	1553	1.1	1.0	2.0
	7.5'	608	1.3	1.3	7.5'	384	1.9	1.4	4.0	4.0'	261	2.9	1.4	7.0	4.0'	1131	1.2	1.1	2.0
	10.0'	342	1.7	1.7	10.0'	211	2.5	2.1	6.0	5.0'	186	3.3	1.6	8.0	5.0'	846	1.2	1.1	3.0
	12.5'	219	2.3	2.3	12.5'	143	3.0	2.7	7.0	6.0'	128	4.0	2.1	10.0	6.0'	503	2.0	1.3	3.0
SPOT	5.0'	894	1.3	1.3	5.0'	559	2.1	1.5	3.0	3.0'	338	3.1	1.5	5.0	3.0'	1275	1.4	1.1	2.0
	7.5'	398	2.2	2.2	7.5'	265	2.8	2.5	4.0	4.0'	212	3.8	2.0	6.0	4.0'	903	1.6	1.2	2.0
	10.0'	224	2.9	2.9	10.0'	145	3.9	3.3	5.0	5.0'	132	4.8	2.7	7.0	5.0'	561	2.1	1.5	3.0
	12.5'	144	3.6	3.6	12.5'	95	4.7	4.2	7.0	6.0'	95	5.6	3.1	9.0	6.0'	402	2.3	1.8	3.0
FLOOD	5.0'	539	2.0	2.0	5.0'	338	2.8	2.5	3.0	3.0'	269	3.5	2.0	4.0	3.0'	814	2.1	1.4	2.0
	7.5'	240	3.1	3.1	7.5'	162	3.8	3.5	4.0	4.0'	143	4.6	2.9	5.0	4.0'	573	2.1	1.7	2.0
	10.0'	135	4.0	4.0	10.0'	92	5.1	4.5	5.0	5.0'	92	5.7	3.5	7.0	5.0'	340	2.8	2.5	3.0
	12.5'	87	5.1	5.1	12.5'	58	6.5	5.7	6.0	6.0'	65	7.0	4.2	8.0	6.0'	255	3.1	2.8	3.0
WIDE FLOOD	5.0'	284	3.3	3.3	5.0'	222	3.6	3.2	2.0	3.0'	191	3.2	2.7	3.0	3.0'	550	2.3	1.8	1.0
	7.5'	121	5.0	5.0	7.5'	95	5.4	5.1	3.0	4.0'	108	4.2	3.6	4.0	4.0'	283	3.3	3.1	2.0
	10.0'	67	6.6	6.6	10.0'	53	7.4	6.8	4.0	5.0'	69	5.5	4.6	5.0	5.0'	201	3.8	3.4	2.0
	12.5'	43	8.3	8.3	12.5'	34	9.2	8.6	5.0	6.0'	48	6.5	5.4	6.0	6.0'	138	4.6	4.3	2.0

PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Cylindrix 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 ---

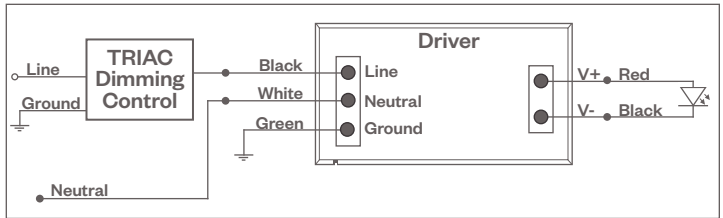
TRIAC (Forward Phase) DIMMING (Standard)

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

TRIAC Wiring Diagram



Compatible Dimmers†:

Wall Box (TRIAC 120VAC)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Skylark"	

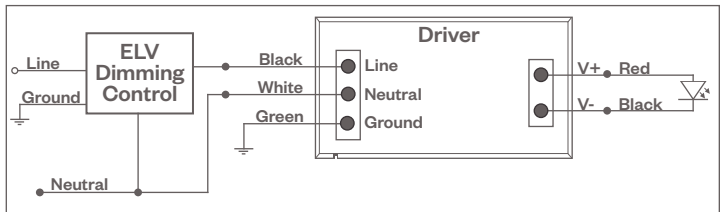
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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

ELV Wiring Diagram



Compatible Dimmers†:

Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Maestro"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

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:

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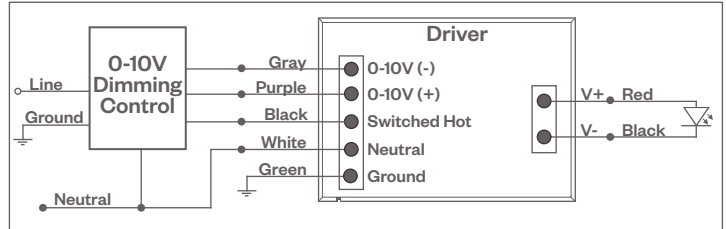
0-10V DIMMING

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-TV1 Interface

LUTRON LDE1 DIMMING

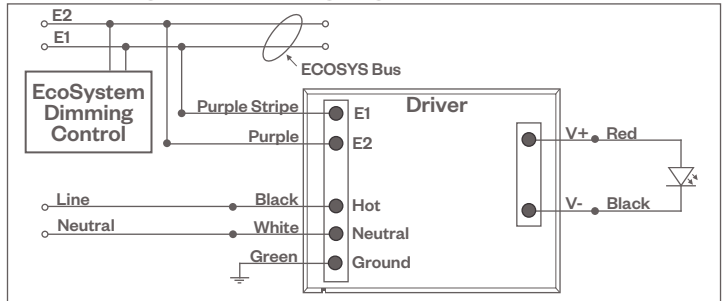
Integrates into Lutron EcoSystem building management

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
Energj Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

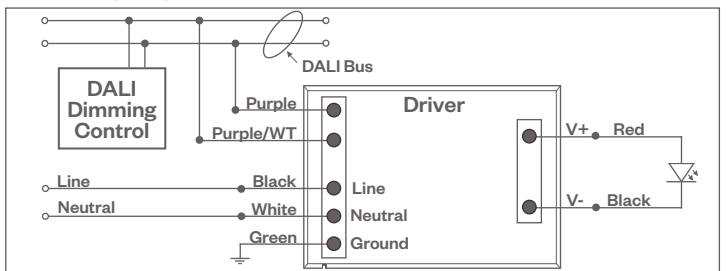
DALI DIMMING

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.

PROJECT:

TYPE:

EMERGENCY DIMMING

Wiring Diagram

