

Cylindrix® III

Semi-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.

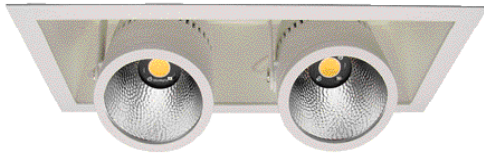
Product Overview

| | |
|---------------|--|
| Type: | Semi-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 |

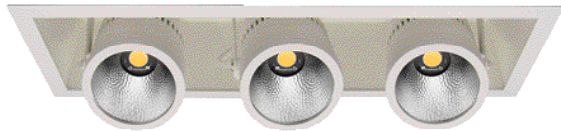


PROJECT:

TYPE:



2 Light



3 Light

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

Fixture Type

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

See separate spec sheet for 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 6 for other beam spreads



PROJECT:

TYPE:

Frame Ordering Information

| | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------------------|--|---|---|---|-------------------------------------|---|
| 1 <u>Model</u> | C3R/SR-NC-FRAME (new construction) C3SR-CP-FRAME (Chicago Plenum) | | | | 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 |
| 2 <u>Style</u> | T - trimmed | | | | 6 <u>Options/Accessories</u> | EM* - emergency battery pack, available on 2 or 3 light - powers only 1 head of the total fixture (not available on CP option) <i>* If this option is selected, you must also select EM option in the Trim Ordering section.</i> |
| 3 <u># of Heads</u> | 1 2 3 | | | | | |
| 4 <u>Voltage</u> | 120 277 | | | | | |

Trim Ordering Information

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|--------------------------------------|--|---|---|---|----|
| 1 <u>Model</u> | C3SR-NC-TRIM (new construction) C3SR-CP-TRIM (Chicago Plenum) | | | | 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> | | | | |
| 2 <u>Style</u> | T - trimmed | | | | 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 | | | | |
| 3 <u># of Heads</u> | 1 2 3 | | | | 10 <u>Options/Accessories</u> | 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 (not available on CP option) <i>* If this option is selected, you must also select EM option in the Frame Ordering section.</i> | | | | |
| 4 <u>Wattage</u> | 16 19 23 27 31 | | | | | | | | | |
| 5 <u>Finish (for housing, head & trim)</u> | WT - white texture BT - black texture ST - silver texture <i>Other finishes, consult factory</i> | | | | | | | | | |
| 6 <u>Voltage</u> | 120-277 | | | | | | | | | |
| 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°) | | | | | | | | | |

* 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
Complete die-cast optical head construction
Passive cooled

Optical

Tilt: 0-45°x45° (R)
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 7-9 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"

Consult Factory for thicker ceilings

Certifications

CSA listed to UL standards

Suitable for damp locations

Indoor use only

CCEA listed for use in Chicago (specific models only)

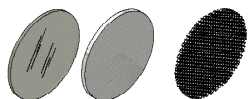
Warranty

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

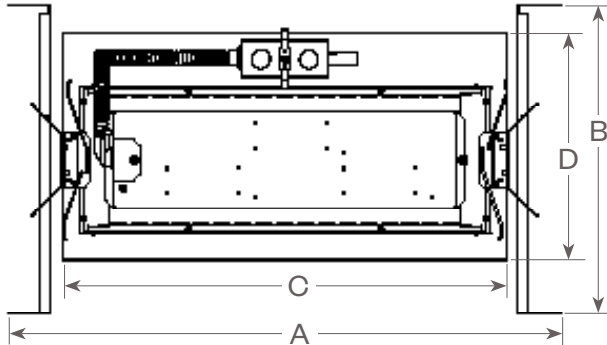
Semi-Recessed Multiples



PROJECT:

TYPE:

Cylindrix III Multiples: Semi-Recessed

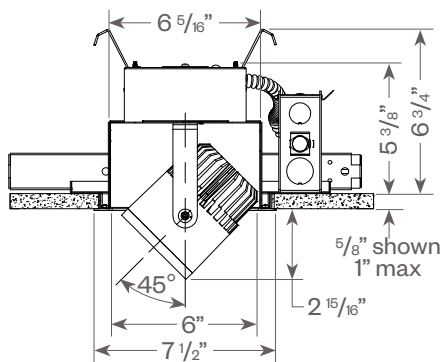


| | 1 Light | 2 Light | 3 Light |
|---|--------------------|--------------------|--------------------|
| A | 13 3/4" | 20 1/4" | 25 15/16" |
| B | 14 1/2" max 25" | 14 1/2" max 25" | 14 1/2" max 25" |
| C | 8 9/16" | 15 1/16" | 20 13/16" |
| D | 10 11/16" | 10 11/16" | 10 11/16" |

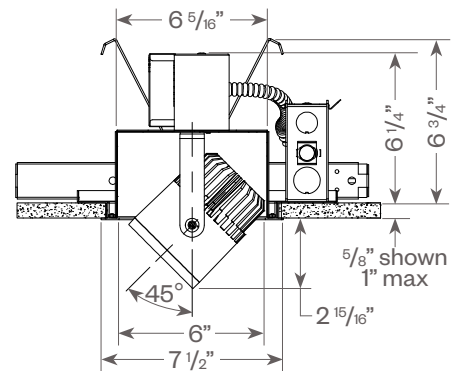
Ceiling cut out: 1 Light - 7 1/8" x 7 7/8"
 2 Light - 7 1/8" x 13 5/8"
 3 Light - 7 1/8" x 19 5/16"

End View

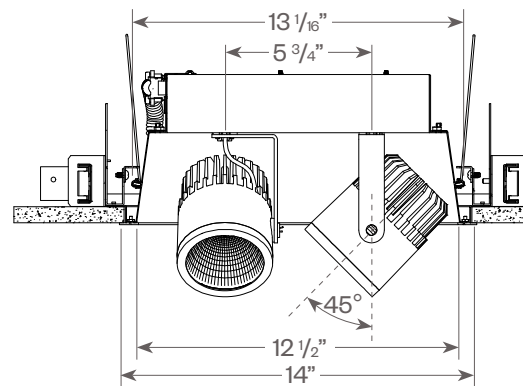
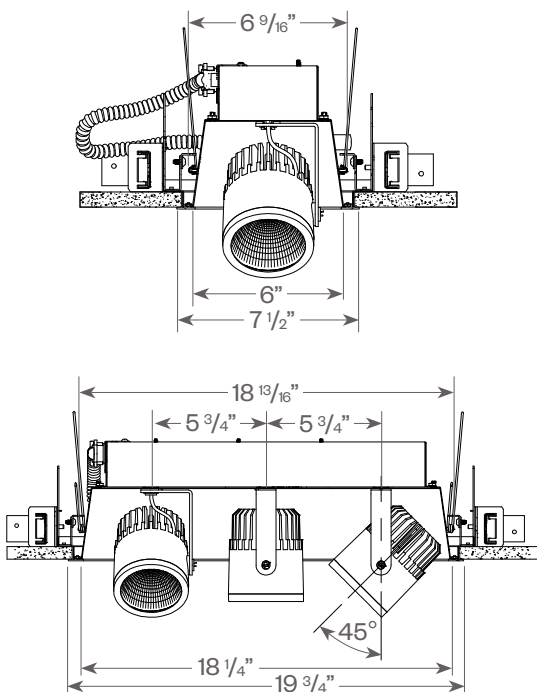
Standard Driver (ELV/TRIAC)



Hi-lume®/0-10V/DALI Driver



Side View



Cylindrix[®] III

Semi-Recessed Multiples



PROJECT:

TYPE:

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

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

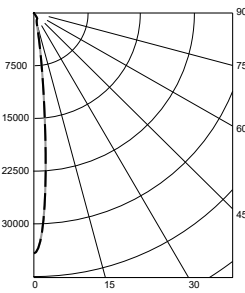
| CCT: | 2700K-83 | 3000K-83 | 3500K-83 | 4000K-83 |
|---------|----------|----------|----------|----------|
| Factor: | 0.96 | 1.0 | 1.02 | 1.04 |

| 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

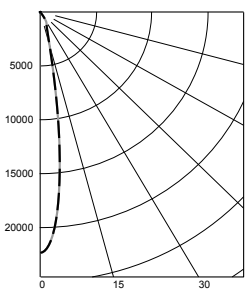
Narrow Spot (NSP), 10°
LTL #11906314.01A
Lumens: 2,426



Candelas at Nadir

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

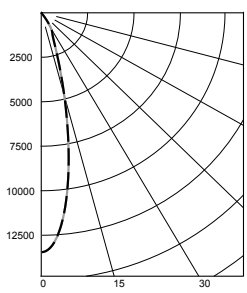
Spot (SP), 15°
LTL # 13609366.09
Lumens: 3264



Candelas at Nadir

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

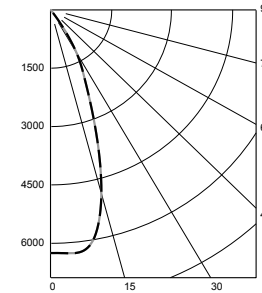
Flood (FL), 25°
LTL # 13609366.10
Lumens: 3306



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

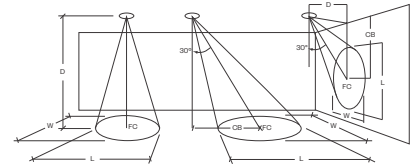


Candelas at Nadir

| 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 ---

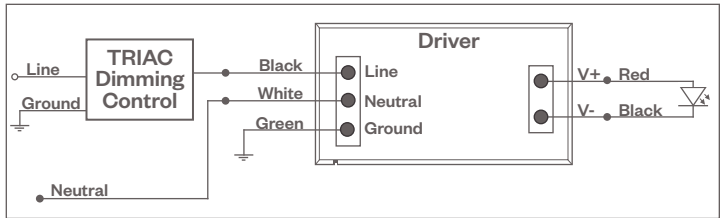
TRIAC (Forward Phase) DIMMING (Standard)

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" | |

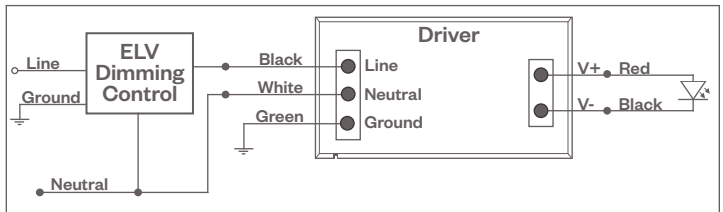
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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:

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.

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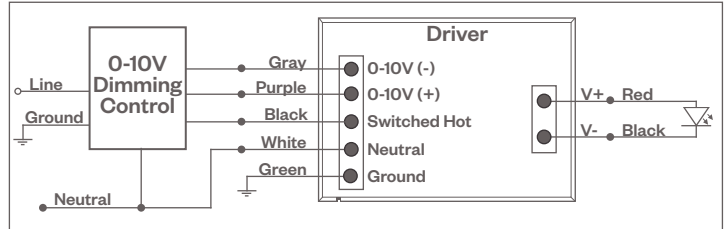
0-10V DIMMING

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

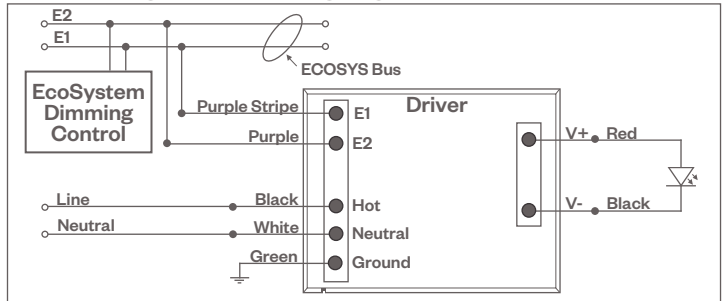
Integrates into Lutron EcoSystem building management

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

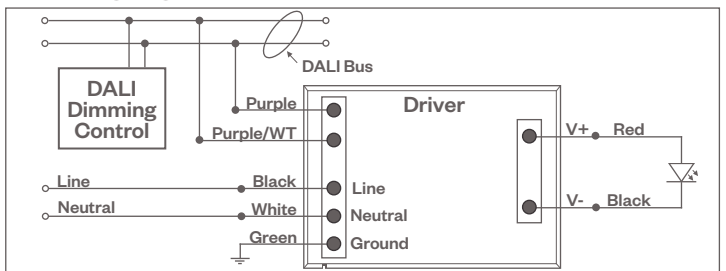
DALI DIMMING

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

