

Evolve[®] 4.75"

Square Downlight
(High Power)

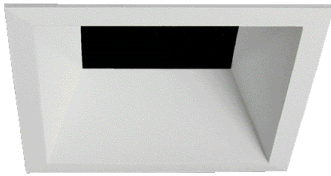


Features

The Evolve 4.75 Downlight features the fit, finish and attention to detail of the existing Evolve line that you've loved since its introduction in 2006. With the current advancements in lighting technology Evolve 4.75" delivers the performance, energy savings and color you expect from a spec-grade LED downlight. Impressive performance, high lumen delivery and consistent color for sustainable lighting designs.

Product Overview

- Fixture Type: Recessed Downlight
- Wattage: 27, 36, 42, 48
- Color Temp: 2200K, 2700K, 3000K, 3500K, 4000K
- CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite LED and 3K Class A LED available
- Dimming: ELV & TRIAC, 120/277VAC (36W ELV & TRIAC, 120V only)
Lutron LDE1 Hi-lume[®] 1% Soft-On/Fade-to-Black (120/277VAC)
0-10V (120/277VAC) - 1% Dim
DALI dimming - 1% Dim



Downlight

PROJECT:

TYPE:



Trimless

Fixture Type

| Round/Square | New Construction | Trim | Trimless |
|--------------|------------------|------|----------|
| Yes | Yes | Yes | Yes |

See separate spec sheet for Round trim

Performance Chart

| Watts | Delivered Lumens | LPW | Color Temp |
|-------|------------------|------|------------|
| 27 | 2,186 | 81 | 3000K-83 |
| 36 | 3108 | 84.7 | 3000K-83 |
| 42 | 3435 | 81.8 | 3000K-83 |
| 48 | 3903 | 82.7 | 3000K-83 |

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

Data is base on 48W, Wide Flood optics. See pages 5-6 for other performance data.

Electrical Data

| | 27W | | 36W | | 42W | | 48W | |
|------|--------------|------|--------------|------|--------------|------|--------------|------|
| | System Watts | Amps | System Watts | Amps | System Watts | Amps | System Watts | Amps |
| 120v | 27 | 0.23 | 36 | 0.30 | 42 | 0.35 | 48 | 0.42 |
| 277v | 27 | 0.10 | 36 | 0.13 | 42 | 0.15 | 48 | 0.18 |

Electronic constant current LED driver

* Includes thermal protector, 2w power consumption



Evolve[®] 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

Housing/Frame Ordering Information

| 1 | 2 | 3 | 4 | 5 | 6 |
|--|---|---|---|---|--|
| 1 <u>Model</u> For New Construction E4.75SX-NC-A17[†] (New Construction) E4.75SX-CP-A17[†] (Chicago Plenum, 27W only) E4.75SX-IC-A17[†] (Insulated Ceiling/air tight, 27W only) | 2 <u>Style</u> T - trimmed TL - trimless (not available for use with Grid ceiling) | 3 <u>Wattage</u> 27 36 (not for use with CP or IC housing) 42 (not for use with CP or IC housing) 48 (not for use with CP or IC housing) | 4 <u>Voltage</u> 120 277 120/277 (for use with IC housing only) | 5 <u>Driver</u> (for non-dimming, select LE/TE option) LE/TE - TRIAC/ELV dimming (for 36W LE/TE dimming, 120V only) HILUME-H-ECO - Lutron LDE1 Hi-lume [®] 1% Soft-On/ Fade-to-Black (not available for 48W) 0-10V - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim | 6 <u>Options</u> EM - emergency battery pack with remote test switch (not available for use with CP or IC options) HB49 - hanger bars from min 29" to max 49" |

Trim Ordering Information

| E4.75SDX-A17 | | | | | |
|--|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 <u>Model</u> E4.75SDX-A17 [†] | 2 <u>Style</u> T - trimmed TL - trimless (not available for use with Grid ceiling) | 3 <u>Finish</u> For Trimmed Fixture MWW - matte white, white flange MBW - matte black, white flange SLVW - matte silver, white flange MBB - matte black, black flange For Trimless Fixture MW - matte white MB - matte black SLV - matte silver | 4 <u>Beam Spreads</u> SP - spot, 15° FL - flood, 25° WF - wide flood, 40° VWF - very wide flood, 70° | 5 <u>Color Temp</u> 83 CRI 90+ CRI 27 - 2700K-83 229 - 2200K-90+ CRISP - CrispWhite 30 - 3000K-83 279 - 2700K-90+ 3CLA - 3K Class A 35 - 3500K-83 309 - 3000K-90+ 40 - 4000K-83 359 - 3500K-90+ 409 - 4000K-90+ | 6 <u>Options/Accessories</u> WET - wet location (for trimmed fixture only) SOL - solite lens |

[†] The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

Evolve® 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

Specifications

Application

Commercial and hospitality ambient lighting

Housing Construction

- 20 ga. galvanized steel frame
- Formed aperture plate with 5/8" lip
- Integral adjustable locking mounting bars
- Thermally protected
- Die-cast lamp housing and heatsink

Reflector Construction

- Die-cast aluminum seamless self-flanged trim
- Steel mounting ring with spring clips

Optical

- Beam Spreads: Spot, 15°; Flood, 25°; Wide Flood, 40°; Very Wide Flood, 70°
- Optional Solite aperture lens

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
- Class A** 3000K (high CRI, high gamut)

R9 Values: 11 (83 CRI), 55 (90+ CRI)

Binning: 3 MacAdam (SDCM)

**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: 27, 36, 42, 48

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 damage is not covered under warranty.

Drivers

- LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase (for 36W LE/TE dimming 120V only)
- 0-10V dimming, 1% dim
- Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black (not available for 48W)
- DALI dimming, 1% dim
- See pages 7-9 for more dimming information

Finish

- Powder coat paint
- Consult factory for custom finishes

Mounting

- 26" Hanger bars included
- Optional **HB49** - hanger bars from min 29" to max 49" available

Trimmed Fixture:

For use in grid or sheetrock ceilings, max ceiling thickness 1"

Trimless Fixture:

For use in sheetrock ceilings, max ceiling thickness 5/8"

Certifications

- CSA approved to UL standards as tested by CSA
- Damp location
- Chicago Plenum (CCEA) option (27W only)
- IC/AT rated option (27W only)
- Wet location option (adds clear lens and trim gasket)
- Title 24 compliant (27W & 36W only)

Warranty

5 year limited warranty

Evoke® 4.75"

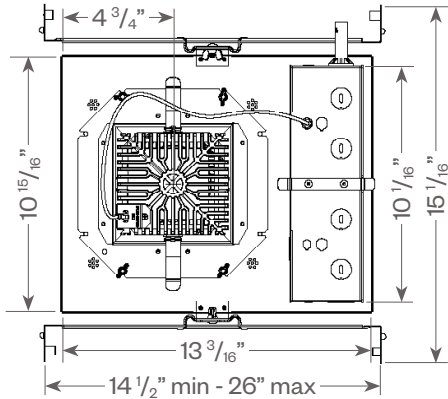
4.75" Square Downlight (High Power)



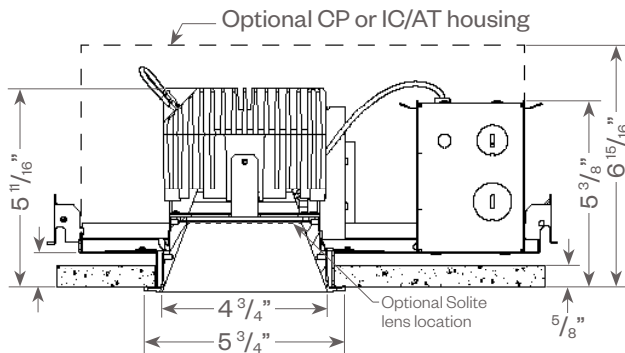
PROJECT:

TYPE:

Evoke Square Downlight:

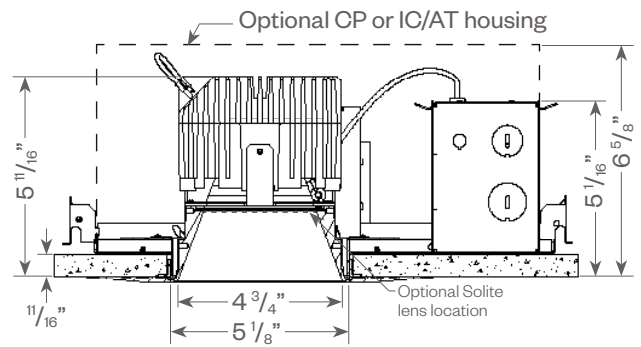


Trimmed



Ceiling cut out: 5 1/8" sq.

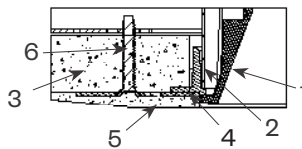
Trimless



Ceiling cut out: 5 7/8" sq.

Plaster Frame Installation Detail (for trimless fixture only)

1. Reflector Trim
2. Aperture plate
3. Ceiling
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



Evoke® 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

Evoke Square Downlight:

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: | 27W | 36W | 42W | 48W |
|----------|------|-----|------|-----|
| Factor: | 0.75 | 1.0 | 1.17 | * |

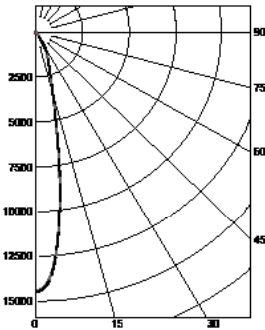
*For 48W data see page 7

| 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 |

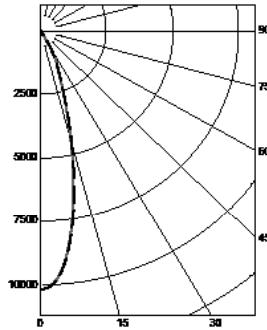
36W LED, 3000K-83

Spot (SP) Distribution, 15°
LTL #1087053
Lumens: 2,899; 79.1 Lm/W



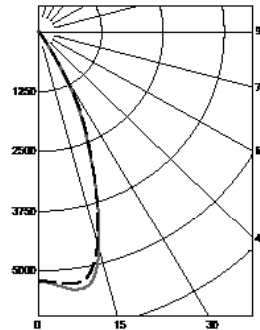
| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 14460 |
| 5 | 12180 |
| 15 | 3256 |
| 25 | 1367 |
| 35 | 68 |
| 45 | 55 |

Flood (FL) Distribution, 25°
LTL #1087054
Lumens: 3,093; 84.3 Lm/W



| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 10170 |
| 5 | 9437 |
| 15 | 4481 |
| 25 | 1483 |
| 35 | 78 |
| 45 | 39 |

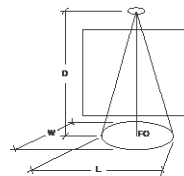
Wide Flood (WF) Distribution, 40°
LTL #1087055
Lumens: 3,108; 84.7 Lm/W



| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 5237 |
| 5 | 5351 |
| 15 | 4644 |
| 25 | 2048 |
| 35 | 163 |
| 45 | 43 |

Application Data:

| | | 0° Aiming Angle Horizontal Footcandles | | | |
|------------|-------|--|-----|-----|---|
| | | D | FC | L | W |
| Spot | 5.0' | 580 | 1.5 | 1.5 | |
| | 7.5' | 258 | 2.6 | 2.6 | |
| | 10.0' | 145 | 3.3 | 3.3 | |
| | 12.5' | 93 | 4.1 | 4.1 | |
| Flood | 5.0' | 408 | 2.4 | 2.4 | |
| | 7.5' | 182 | 3.5 | 3.5 | |
| | 10.0' | 102 | 4.7 | 4.7 | |
| | 12.5' | 66 | 5.8 | 5.8 | |
| Wide Flood | 5.0' | 210 | 3.7 | 3.7 | |
| | 7.5' | 95 | 5.6 | 5.6 | |
| | 10.0' | 54 | 7.4 | 7.4 | |
| | 12.5' | 34 | 9.3 | 9.3 | |



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.

Evoke® 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

Evoke Square Downlight:

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: | 27W | 36W | 42W | 48W |
|----------|------|-----|------|-----|
| Factor: | 0.56 | * | 0.88 | 1.0 |

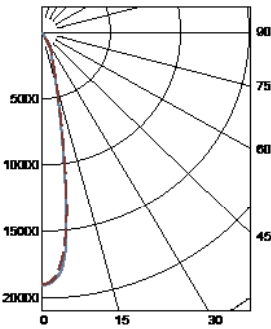
*For 36W data see page 6

| 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 |

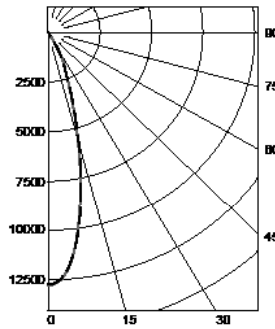
48W LED, 3000K-83

Spot (SP) Distribution, 15°
LTL #1087052
Lumens: 3,738; 79.2 Lm/W



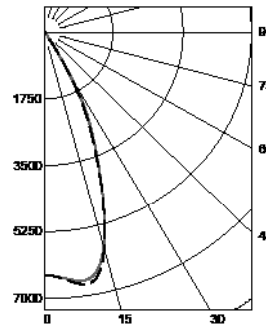
| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 18990 |
| 5 | 17600 |
| 15 | 4051 |
| 25 | 1629 |
| 35 | 81 |
| 45 | 64 |

Flood (FL) Distribution, 25°
LTL #1087051
Lumens: 3,887; 82.4 Lm/W



| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 12750 |
| 5 | 11880 |
| 15 | 5670 |
| 25 | 1877 |
| 35 | 91 |
| 45 | 47 |

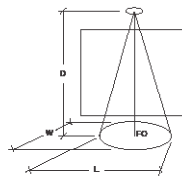
Wide Flood (WF) Distribution, 40°
LTL #1087050
Lumens: 3,903; 82.7 Lm/W



| Candelas at Nadir | |
|-------------------|---------|
| Deg | Candela |
| 0 | 6385 |
| 5 | 6506 |
| 15 | 5766 |
| 25 | 2738 |
| 35 | 221 |
| 45 | 53 |

Application Data:

| | 0° Aiming Angle Horizontal Footcandles | | | |
|------------|--|-----|-----|-----|
| | D | FC | L | W |
| Spot | 5.0' | 762 | 1.5 | 1.6 |
| | 7.5' | 339 | 2.8 | 2.8 |
| | 10.0' | 191 | 3.4 | 3.4 |
| | 12.5' | 122 | 4.2 | 4.2 |
| Flood | 5.0' | 511 | 2.4 | 2.5 |
| | 7.5' | 228 | 3.5 | 3.6 |
| | 10.0' | 128 | 4.7 | 4.8 |
| | 12.5' | 82 | 5.8 | 5.9 |
| Wide Flood | 5.0' | 257 | 3.8 | 3.8 |
| | 7.5' | 116 | 5.7 | 5.7 |
| | 10.0' | 66 | 7.5 | 7.5 |
| | 12.5' | 42 | 9.5 | 9.5 |



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.

Evoke® 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Evoke 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 ---

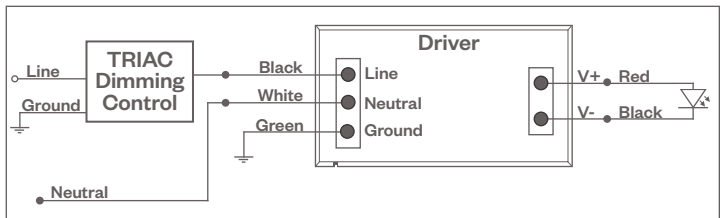
TRIAC (Forward Phase) DIMMING (Standard)

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)

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

Central System

Lutron "GP" Panel
Lutron Grafik Eye QS

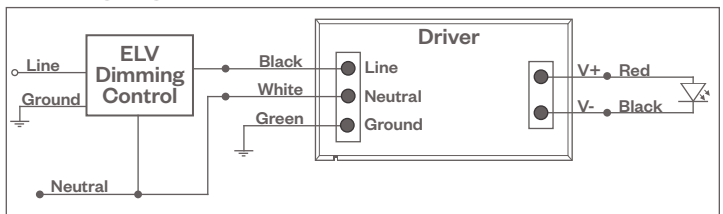
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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)

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

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.

Evoke® 4.75"

4.75" Square Downlight (High Power)



PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Evoke 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 ---

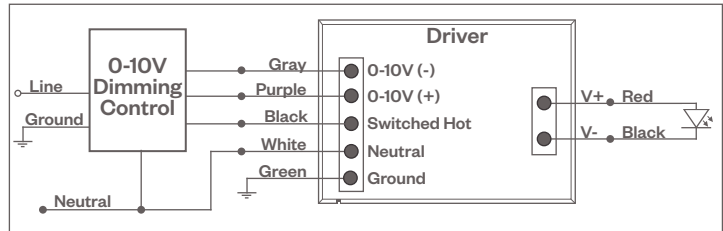
0-10V DIMMING

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-TV1 Interface

LUTRON LDE1 DIMMING

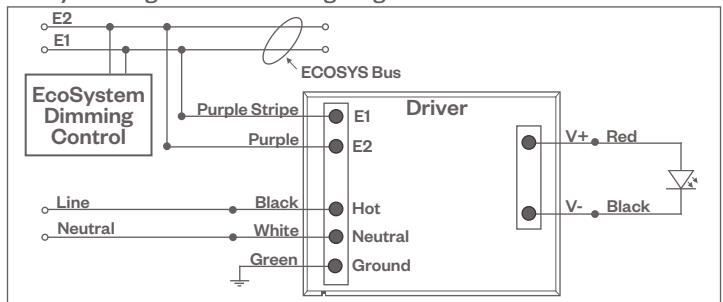
Integrates into Lutron EcoSystem building management

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

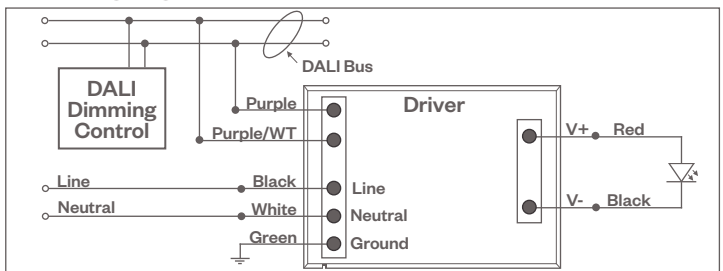
DALI DIMMING

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.

Evoke[®] 4.75"

4.75" Square Downlight (High Power)



Evoke 4.75" SDX

PROJECT:

TYPE:

EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram

