

# Evoked<sup>®</sup> 4.75"

Round Downlight  
(High Power)



Downlight

## Features

The Evoked 4.75 Downlight features the fit, finish and attention to detail of the existing Evoked line that you've loved since its introduction in 2006. With the current advancements in lighting technology Evoked 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 Hi-lume <sup>®</sup> H Series/EcoSystem - 1% dim with soft on, fade to black, 120/277VAC 0-10V (120/277VAC) - 1% Dim DALI dimming - 1% Dim

## PROJECT:



Trimless

## TYPE:

### Fixture Type

Round/Square	New Construction	Trim	Trimless
Yes	Yes	Yes	Yes

See separate spec sheet for Square trim

### Performance Chart

Watts	Delivered Lumens	LPW	Color Temp
27	2,130	78.9	3000K-83
36	3,016	79.4	3000K-83
42	3,348	79.7	3000K-83
48	3,804	80.5	3000K-83

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

Data is base on 48W, Wide Flood optics. See pages 6-7 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" Round Downlight (High Power)



## PROJECT:

## TYPE:

### Housing/Frame Ordering Information

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

### Trim Ordering Information

1	2	3	4	5	6
<b>1</b> <u>Model</u> <b>E4.75RDSX-A17+</b> (shallow trim) <b>E4.75RDX-A17+</b>	<b>2</b> <u>Style</u> <b>T</b> - trimmed <b>TL</b> - trimless (not available for use with Grid ceiling)	<b>3</b> <u>Finish</u> For Trimmed Fixture <b>SDW</b> - semi-diffuse, white flange <b>SDC</b> - semi-diffuse, clear flange (flange finish matches cone finish) <b>MWW</b> - matte white, white flange <b>MBB</b> - matte black, black flange  For Trimless Fixture <b>SD</b> - semi-diffuse <b>MW</b> - matte white	<b>4</b> <u>Beam Spreads</u> <b>SP</b> - spot, 15° <b>FL</b> - flood, 25° <b>WF</b> - wide flood, 40° <b>VWF</b> - very wide flood, 70°	<b>5</b> <u>Color Temp</u> <b>83 CRI</b> <b>90+ CRI</b> <b>27</b> - 2700K-83 <b>229</b> - 2200K-90+ <b>CRISP</b> - CrispWhite <b>30</b> - 3000K-83 <b>279</b> - 2700K-90+ <b>3CLA</b> - 3K Class A <b>35</b> - 3500K-83 <b>309</b> - 3000K-90+ <b>40</b> - 4000K-83 <b>359</b> - 3500K-90+ <b>409</b> - 4000K-90+	<b>6</b> <u>Options/Accessories</u> <b>WET</b> - wet location (for trimmed fixture only) <b>SOL</b> - 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.

# Evoke® 4.75"

4.75" Round Downlight (High Power)



## PROJECT:

## TYPE:

### Specifications

#### Application

Commercial and hospitality ambient lighting

#### Housing Construction

- 20 ga. galvanized steel frame
- 18 ga. galvanized steel splice housing and hanger brackets
- Die-cast aluminum heatsink
- Cast aluminum plaster frame with perforated face (for trimless option)

#### Reflector Construction

Spun aluminum self-flanged reflector, anodized finish

#### Optical

- High reflectance, highly diffuse mixing chamber
- Engineered nano technology lens provide transmission while concealing LED image
- 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 Hilume H Series, EcoSystem, 1% dim, fade to black (not available for 48W)

DALI dimming, 1% dim

*See pages 8-9 for more dimming information*

#### Finish

Wet 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 for E4.75RDX version only)

#### Warranty

5 year limited warranty

# Evoke® 4.75"

4.75" Round Downlight (High Power)

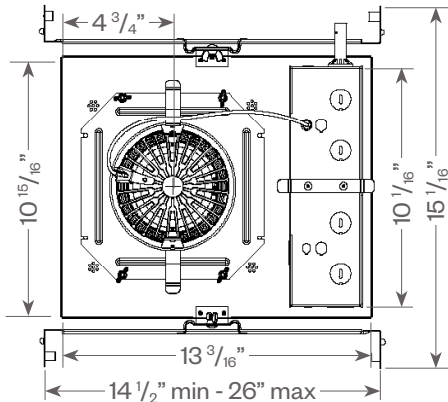


Evoke 4.75" RDSX/RDX

**PROJECT:**

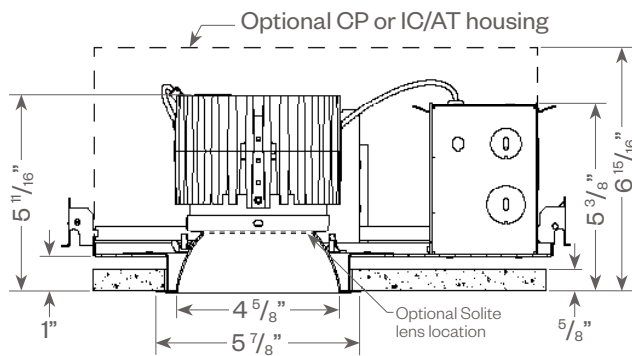
**TYPE:**

## Evoke Round Downlight Shallow:

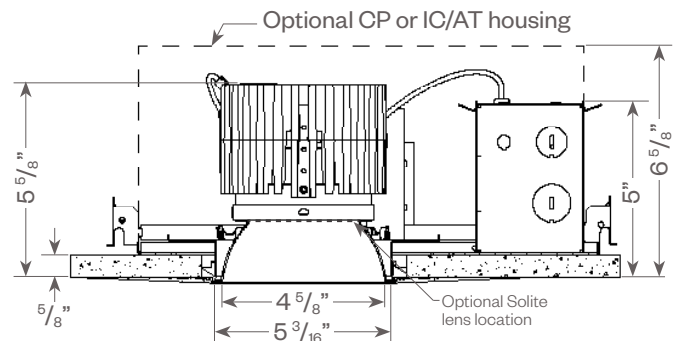


Trimmed

Trimless



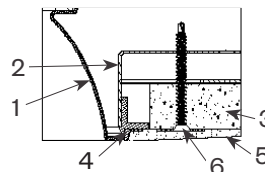
Ceiling cut out: 5 3/8" dia.



Ceiling cut out: 5 7/8" dia.

## 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" Round Downlight (High Power)

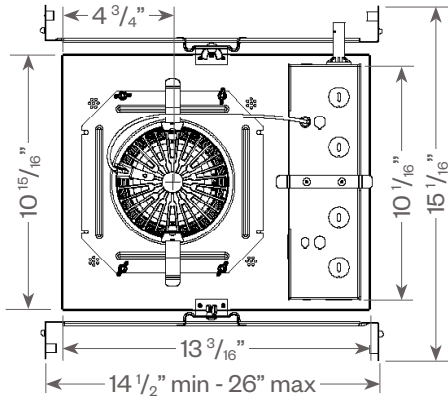


Evoke 4.75" RDSX/RDX

**PROJECT:**

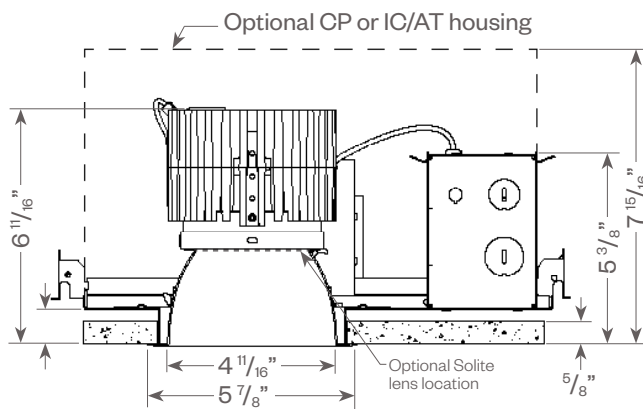
**TYPE:**

## Evoke Round Downlight:

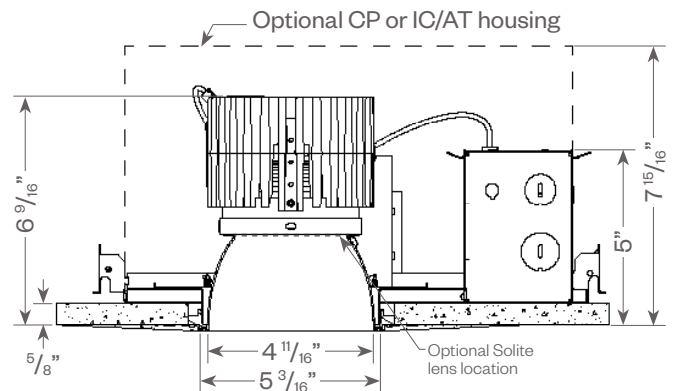


Trimmed

Trimless



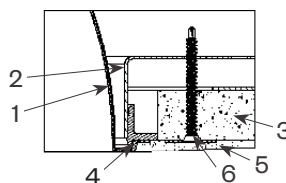
Ceiling cut out: 5 3/8" dia.



Ceiling cut out: 5 7/8" dia.

## 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



# Evolve<sup>®</sup> 4.75"

4.75" Round Downlight (High Power)



## PROJECT:

## TYPE:

### Evolve Round 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	*

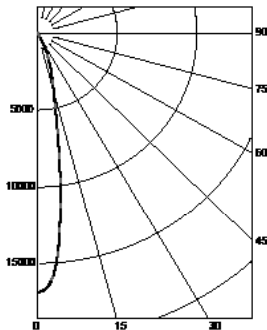
\*For 48W data see page 7

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

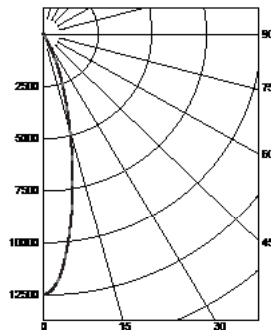
Spot (SP) Distribution, 15°  
LTL #1087061  
Lumens: 2,761; 72.6 Lm/W



Candelas at Nadir

Deg	Candela
0	16870
5	14230
15	3660
25	968
35	106
45	63

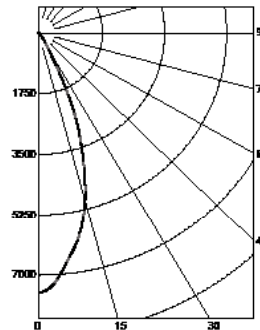
Flood (FL) Distribution, 25°  
LTL#1087059  
Lumens: 2,984; 78.4 Lm/W



Candelas at Nadir

Deg	Candela
0	12460
5	11040
15	4902
25	1177
35	123
45	50

Wide Flood (WF) Distribution, 40°  
LTL #1087060  
Lumens: 3,016; 79.4 Lm/W



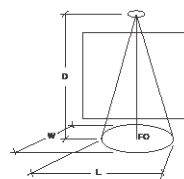
Candelas at Nadir

Deg	Candela
0	7488
5	6980
15	4967
25	1807
35	220
45	55

### Application Data:

0° Aiming Angle  
Horizontal  
Footcandles

	D	FC	L	W
Spot	5.0'	677	1.5	1.5
	7.5'	301	2.5	2.5
	10.0'	169	3.2	3.2
	12.5'	109	3.9	3.9
Flood	5.0'	500	2.2	2.2
	7.5'	222	3.3	3.3
	10.0'	125	4.3	4.3
	12.5'	80	5.3	5.3
Wide Flood	5.0'	301	3.1	3.1
	7.5'	134	4.7	4.7
	10.0'	75	6.2	6.2
	12.5'	48	7.8	7.8



#### 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" Round Downlight (High Power)



**PROJECT:**

**TYPE:**

**Evoke Round 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

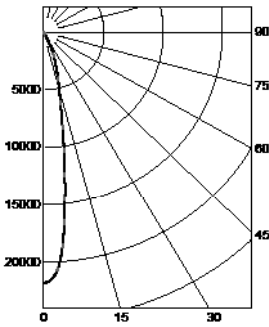
\*For 36W data see page 6

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**

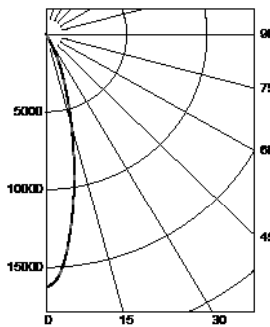
Spot (SP) Distribution, 15°  
LTL #1087056  
Lumens: 3,499; 74.4 Lm/W



Candelas at Nadir

Deg	Candela
0	21790
5	18150
15	4718
25	1198
35	137
45	68

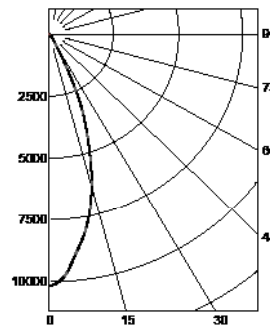
Flood (FL) Distribution, 25°  
LTL #1087058  
Lumens: 3,775; 79.9 Lm/W



Candelas at Nadir

Deg	Candela
0	16290
5	14340
15	6224
25	1438
35	149
45	55

Wide Flood (WF) Distribution, 40°  
LTL # 1087057  
Lumens: 3,804; 80.5 Lm/W

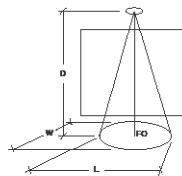


Candelas at Nadir

Deg	Candela
0	10150
5	9394
15	6343
25	2163
35	267
45	59

**Application Data:**

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Spot	5.0'	874	1.5	1.5
	7.5'	388	2.4	2.4
	10.0'	219	3.2	3.2
	12.5'	140	3.8	3.8
Flood	5.0'	653	2.1	2.1
	7.5'	291	3.2	3.2
	10.0'	164	4.2	4.2
	12.5'	105	5.2	5.2
Wide Flood	5.0'	407	3.0	3.0
	7.5'	181	4.5	4.5
	10.0'	102	5.9	5.9
	12.5'	66	7.4	7.4



**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" Round 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 ---**

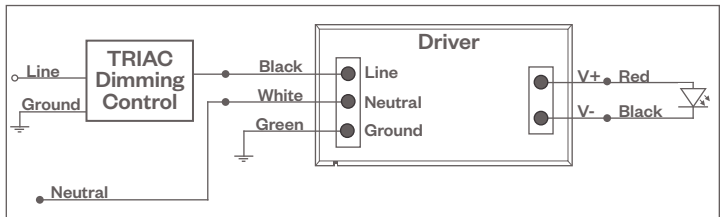
### TRIAC (Forward Phase) DIMMING (Standard)

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

#### Notes:

- 120VAC or 277VAC\* (36W 120V only)
- Dims down to less than 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 (Incandescent Style, Wattage as required)		Central System
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

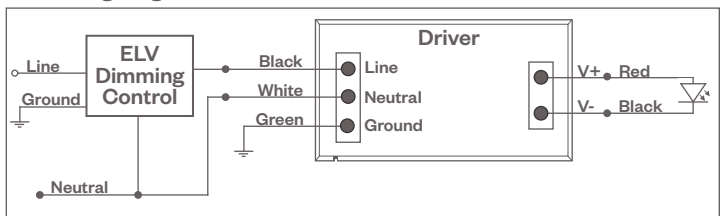
### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

#### Notes:

- 120VAC or 277VAC\* (36W 120V only)
- Dims down to less than 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 Style)		Central System
Lutron "Diva"	Leviton "Surslide"	Lutron "GP" Panel with PHPM-PA Interface
Lutron "Nova-T"	Leviton "Vizio"	Lutron Grafik Eye QS with PHPM-PA Interface
Lutron "Maestro"		
Lutron "Vareo"		
Lutron "Skylark"		

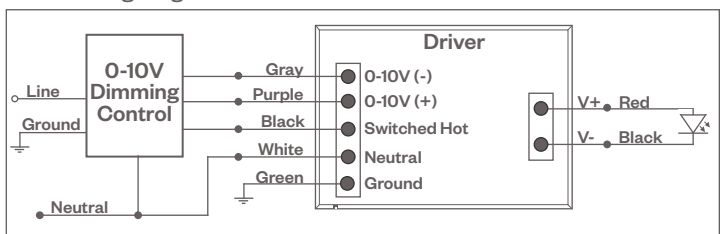
### 0-10V - DIMMING (-0-10V Option)

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	Central System
Lutron "Diva" - DVTV with PP-120H Interface	Leviton Renoir II 0-10V
	Lutron Grafik Eye with GRX-TVI Interface

#### 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 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" Round 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 ---**

### LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

Integrates into Lutron EcoSystem building management

#### Notes:

- 120VAC or 277VAC\*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

#### Compatible Dimmers†:

##### Lutron ECO System

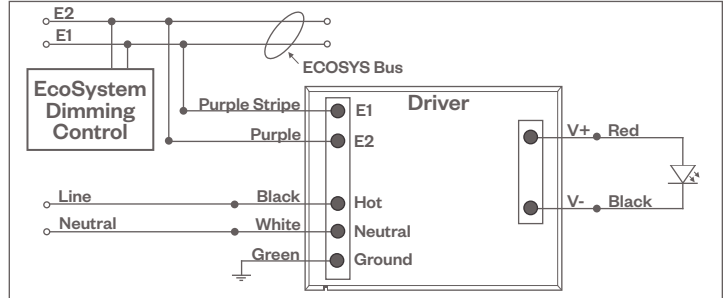
Pow Pak Dimming Modules  
Energi Savr Node  
Grafik Eye QS/Homeworks  
QS Control Unit  
Quantum Hub  
Homeworks QS/My Room

##### Central System

Lutron EcoSystem compatible controls

### HILUME-H-ECO, HILUME-5-ECO

#### EcoSystem Digital Control Wiring Diagram



### DALI DIMMING (-DALI OPTION)

Digital control protocol allows individual fixture control

#### Notes:

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

#### Compatible Dimmers†:

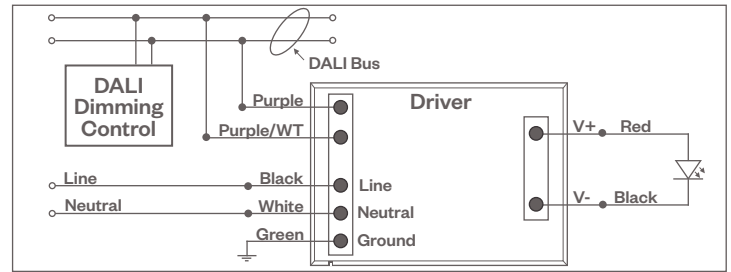
##### Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

##### Central System

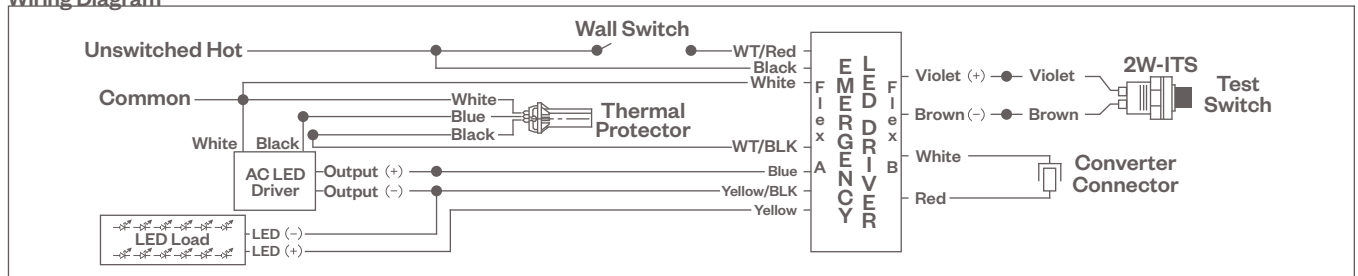
Dynalite  
Fifth Light

#### DALI Wiring Diagram



### EMERGENCY DIMMING (-EM OPTION)

#### 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 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.