

# Evolve<sup>®</sup> 4.75"

Square Downlight  
(High Power)



Downlight

## 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) CrispWhite LED Available 3K Class A LED Available
Dimming:	ELV & TRIAC (120/277VAC) 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 Round trim

### Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
27	2331	86.3	4013	3000K-83
36	3108	84.7	5351	3000K-83
42	3435	81.8	5725	3000K-83
48	3903	82.7	6506	3000K-83

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

Data is base on Spot 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
<b>1</b> <u>Model</u> For New Construction <b>E4.75SX-NC-A17<sup>†</sup></b> (New Construction) <b>E4.75SX-CP-A17<sup>†</sup></b> (Chicago Plenum, 27W only) <b>E4.75SX-IC-A17<sup>†</sup></b> (Insulated Ceiling/air tight, 27W only)	<b>2</b> <u>Style</u> T - trimmed TL - trimless (not available for use with Grid ceiling)	<b>3</b> <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)	<b>4</b> <u>Voltage</u> 120 277 120/277 (for use with IC housing only)	<b>5</b> <u>Driver</u> (for non-dimming, select LE/TE option) LE/TE - TRIAC/ELV dimming <b>HILUME-H-ECO</b> - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black <b>0-10V</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)

### Trim Ordering Information

E4.75SDX-A17					
1	2	3	4	5	6
<b>1</b> <u>Model</u> <b>E4.75SDX-A17<sup>†</sup></b>	<b>2</b> <u>Style</u> T - trimmed TL - trimless (not available for use with Grid ceiling)	<b>3</b> <u>Finish</u> For Trimmed Fixture <b>MWW</b> - matte white, white flange <b>MBW</b> - matte black, white flange <b>SLVW</b> - matte silver, white flange <b>MBB</b> - matte black, black flange  For Trimless Fixture <b>MW</b> - matte white <b>MB</b> - matte black <b>SLV</b> - matte silver	<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> 83 CRI                      90+ CRI <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>6</b> <u>Options/Accessories</u> <b>WET</b> - wet location (for trimmed fixture only) <b>SOL</b> - solite lens

<sup>†</sup> 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" 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)

92 typ. (2200K, 2700K, 3000K, 3500K)

CrispWhite\* LED available

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

R9 Values: 11 (83 CRI), 55 (92 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 (standard)

0-10V, Lutron and DALI systems also available

See pages 8-9 for more dimming information

#### Finish

Powder coat paint

Consult factory for custom finishes

#### Mounting

26" Hanger bars included

Consult factory for hanger bars greater than 26"

##### 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<sup>®</sup> 4.75"

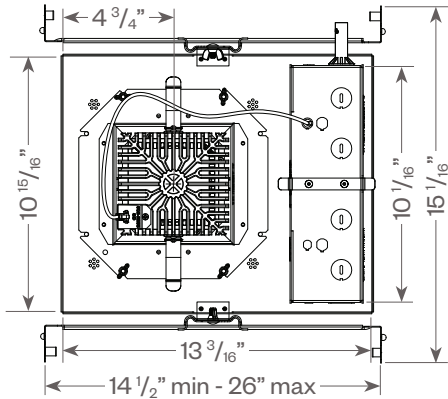
4.75" Square Downlight (High Power)



**PROJECT:**

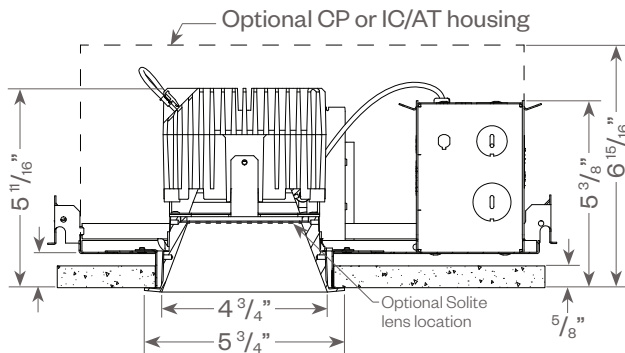
**TYPE:**

## Evoke Square Downlight:

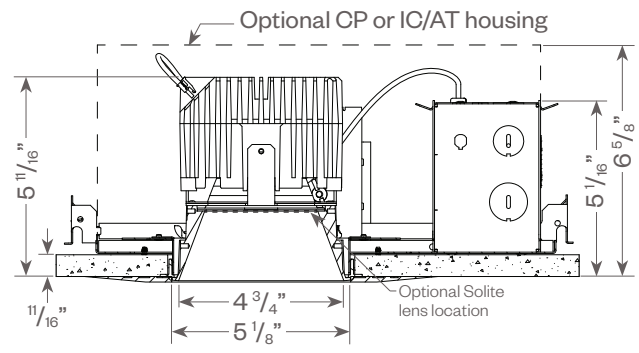


**Trimmed**

**Trimless**



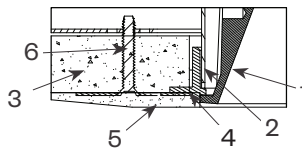
**Ceiling cut out:  $5 \frac{1}{8}$ " sq.**



**Ceiling cut out:  $5 \frac{7}{8}$ " 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)



Evoke 4.75" SDX

## 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	*

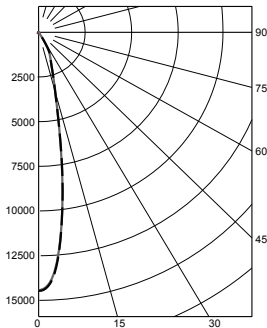
\*For 48W data see page 7

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+	CRISP	3CLA
Factor:	0.71	0.80	0.83	0.87	0.65	0.75

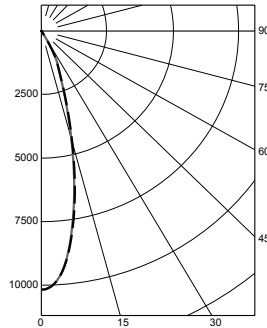
### 36W LED, 3000K-83

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



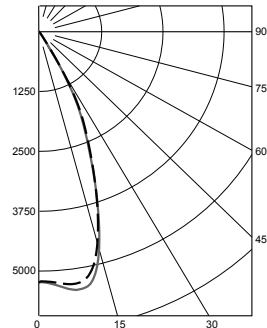
Candelas at Nadir	
Deg	Candela
0	14460
5	12180
15	3256
25	1367
35	68
45	55

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

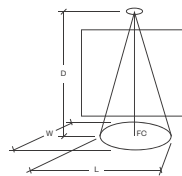
Wide Flood (WF) Distribution, 40°  
LTL #1087055  
Lumens: 3,108; 84.7 Lm/W



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.

# Evolve<sup>®</sup> 4.75"

4.75" Square Downlight (High Power)



## PROJECT:

## TYPE:

### Evolve 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

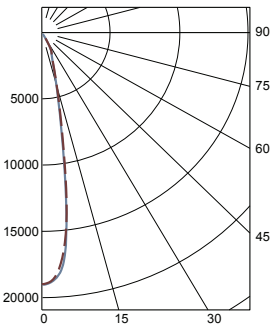
\*For 36W data see page 6

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+	CRISP	3CLA
Factor:	0.71	0.80	0.83	0.87	0.65	0.75

### 48W LED, 3000K-83

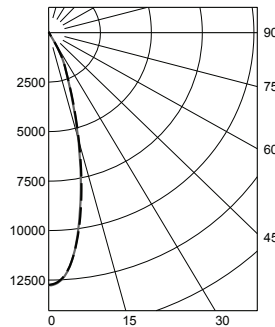
Spot (SP) Distribution, 15°  
LTL #1087052  
Lumens: 3,738; 79.2 Lm/W



**Candelas at Nadir**

Deg	Candela
0	18990
5	17600
15	4051
25	1629
35	81
45	64

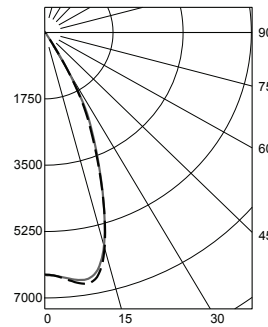
Flood (FL) Distribution, 25°  
LTL #1087051  
Lumens: 3,887; 82.4 Lm/W



**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

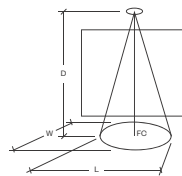


**Candelas at Nadir**

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 ---**

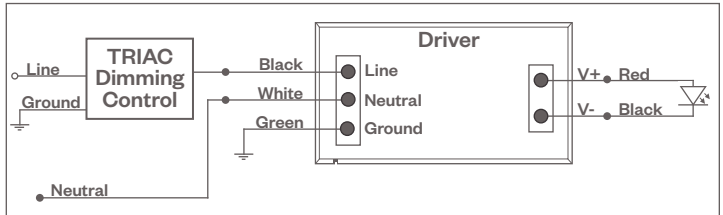
### TRIAC (Forward Phase) DIMMING (Standard)

Utilizes "Standard" 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\*
- 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"		

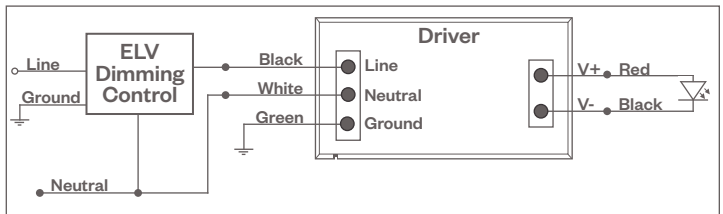
### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

#### Notes:

- 120VAC or 277VAC\*
- 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"		

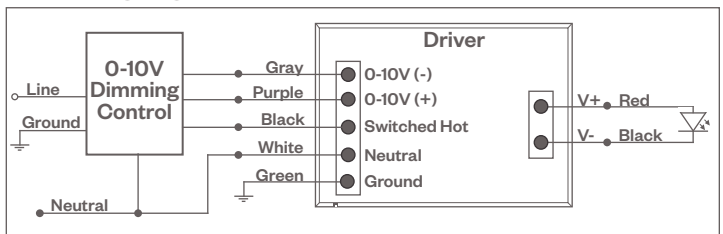
### 0-10V - DIMMING (-0-10V Option)

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<sup>®</sup> 4.75"

4.75" Square Downlight (High Power)



## PROJECT:

## TYPE:

### DIMMING COMPATIBILITY:

Amerlux<sup>®</sup> 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

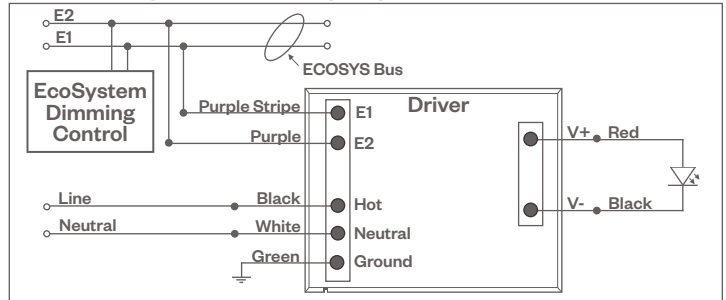
Pow Pak Dimming Modules  
Energi Savr Node  
Grafik Eye QS/Homeworks  
QS Control Unit  
Quantum Hub  
Homeworks QS/My Room

##### 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†:

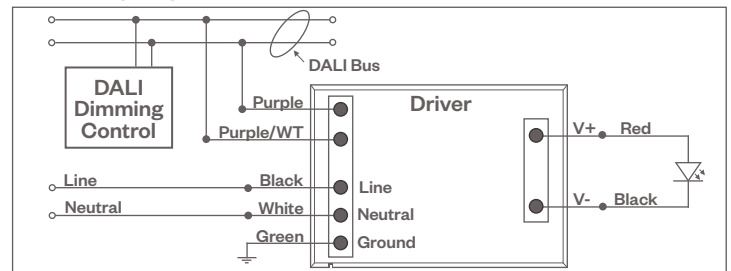
##### Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

##### Central System

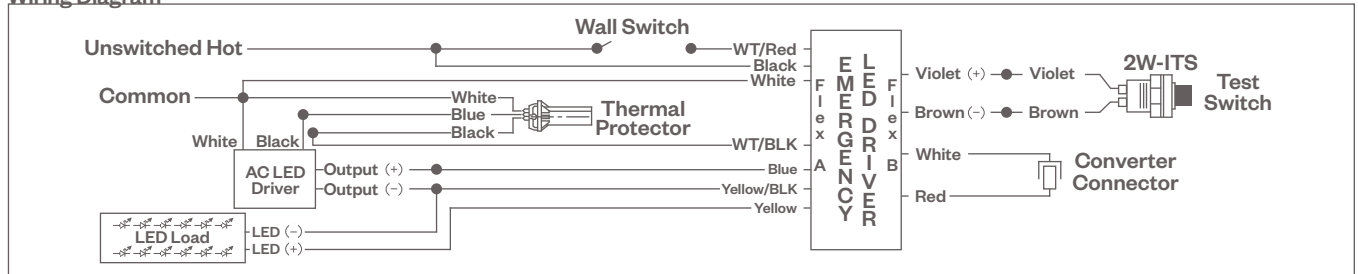
Dynalite  
Fifth Light

#### 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.