

# Evoke® 4.75"

## Round Downlight (High Power)



PROJECT:

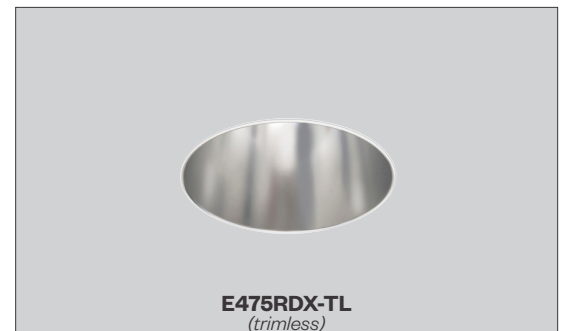
TYPE:

### Features

The Evoke 4.75 Downlight features the fit, finish and attention to detail of the existing Evoke line that you've loved since its introduction in 2006. With the current advancements in lighting technology Evoke 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

Type: Recessed Round Downlight  
 Wattage: 27W, 36W, 42W, 48W  
 Color Temp: 2200K, 2700K, 3000K, 3500K, 4000K  
 CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)  
 90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)  
 CrispWhite & 3K Class A LEDs available  
 Dimming: TRIAC & ELV, 5% Dim, 120/277VAC (36W TRIAC & ELV, 120V only)  
 Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black, 120/277VAC  
 0-10V, 1% Dim, 120/277VAC  
 DALI, 1% Dim, 120/277VAC



### Certifications



### Fixture Summary

#### Fixture Type

Round/Square	New Construction	Trim	Trimless
Yes	Yes	Yes	Yes

See separate spec sheet for Square trim.

#### Performance Data

Watts	Delivered Lumens	LPW	Color Temp-CRI
27	2130	78.9	3000K-83
36	3016	79.4	3000K-83
42	3348	79.7	3000K-83
48	3804	80.5	3000K-83

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

Data is based on 48W, Wide Flood optics. See pg 6-7 for other performance data..

#### Electrical Data

	27W		36W		42W		48W	
Voltage	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	27	.023	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.

# Evoke® 4.75"

## Round Downlight (High Power)



PROJECT:

TYPE:

### Ordering Information - Housing/Frame

1	2	3	4	5	6
1	<b>Model</b> <u>For New Construction</u> <b>E4.75RX-NC-A17</b> <i>(New Construction)</i> <b>E4.75RX-CP-A17</b> <i>(Chicago Plenum, 27W only)</i> <b>E4.75RX-IC-A17</b> <i>(Insulated Ceiling/air tight, 27W only)</i>	2	<b>Style</b> <b>T</b> - trimmed <b>TL</b> - trimless <i>(not available for use with Grid ceiling)</i>	3	<b>Wattage</b> <b>27</b> <b>36</b> <i>(not for use with CP or IC housings)</i> <b>42</b> <i>(not for use with CP or IC housings)</i> <b>48</b> <i>(not for use with CP or IC housings, or HILUME-H-ECO driver)</i>
4	<b>Voltage</b> <b>120</b> <b>277</b> <b>120/277</b> <i>(for use with IC housing only)</i>	5	<b>Driver</b> <i>(for non-dimming, select LE/TE option)</i> <b>LE/TE</b> TRIAC/ELV dimming, 5% dim <i>(for 36W LE/TE dimming, 120V only)</i> <b>HILUME-H-ECO</b> Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black <b>O-10V</b> O-10V dimming; 1% dim <b>DALI</b> DALI dimming; 1% dim	6	<b>Options/Accessories</b> <b>EM</b> emergency battery pack with remote test switch <i>(not available for use with CP or IC options)</i> <b>HB49</b> hanger bars from min 29" to max 49" <i>Note: 26" hanger bars are included as standard. Choose <b>HB49</b> option above for larger mounting spaces only.</i>

### Ordering Information - Trim

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

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## Round Downlight (High Power)



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### 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\* and Class A\*\* 3000K (*high CRI, high gamut*) available  
**R9 Values:** 11 (83 CRI), 55 (92 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 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:** 27W, 36W, 42W, 48W  
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*) or Trailing Edge (*ELV, Reverse Phase*)  
0-10V, Lutron and DALI systems also available  
*See pages 7-8 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

#### Emergency Battery Pack (EM)

IOTA ILB-CP05 Emergency battery pack with remote test switch, output of 5W (*approx. 300 lumens*) for 90 minutes. (*see pg 9 for wiring diagram*)

# Evoke® 4.75"

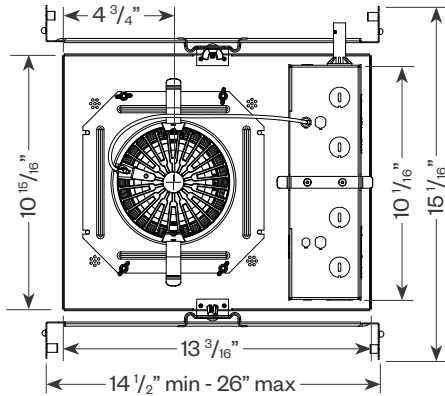
Round Downlight (High Power)



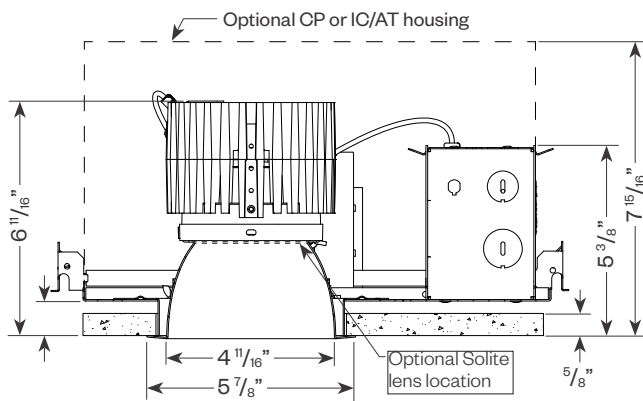
PROJECT:

TYPE:

## Product Details - Round Downlight (RDX)

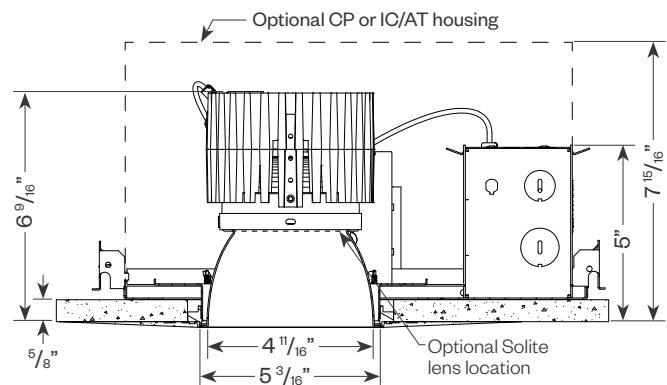


Trimmed



Ceiling cut out: 5 3/8" dia.

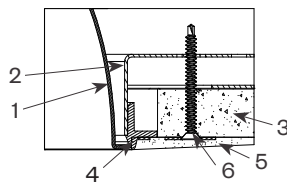
Trimless



Ceiling cut out: 5 7/8" dia.

## Plaster Frame Installation Detail (for trimless fixture only)

1. Reflector Trim
2. Aperture plate
3. Ceiling 5/8"
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



# Evoke® 4.75"

## Round Downlight (High Power)



PROJECT:

TYPE:

### Performance Data

**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

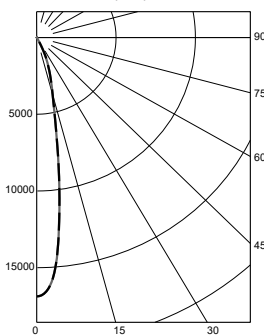
Wattage:	27W	36W	42W	48W
Factor:	0.75	1.0	1.17	*

\* For 48W data see page 7

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

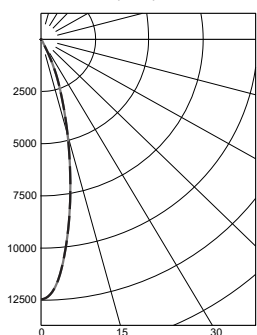
### 36W LED, 3000K-83

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



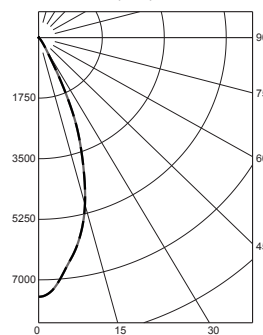
Candelas at Nadir	
Deg	Candela
0	16870
5	14230
15	3660
25	968
35	106
45	63

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

#### Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

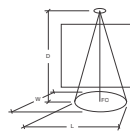
D=Distance to floor or wall.

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			
	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

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
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

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
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

# Evoke® 4.75"

## Round Downlight (High Power)



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TYPE:

### Performance Data

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

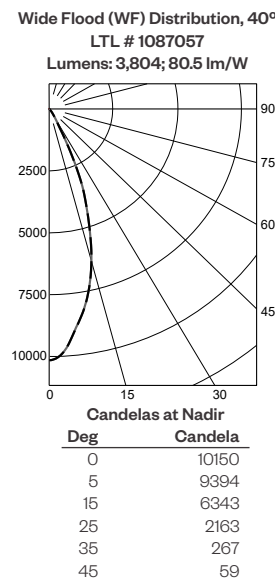
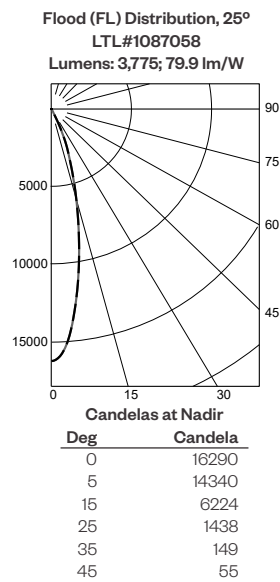
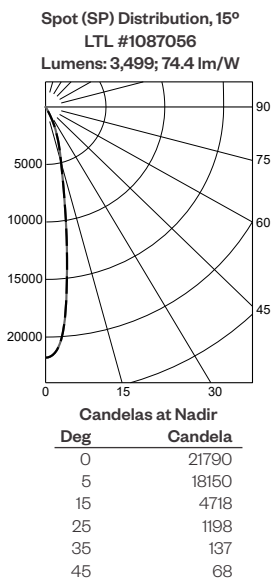
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

Wattage:	27W	36W	42W	48W
Factor:	0.56	*	0.88	1.0

\* For 36W data see page 6

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



### Application Data

#### Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

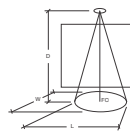
D=Distance to floor or wall.

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**

	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

**0° Aiming Angle Horizontal Footcandles**

	D	FC	L	W
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

**0° Aiming Angle Horizontal Footcandles**

	D	FC	L	W
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

# Evoke® 4.75"

## Round Downlight (High Power)



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### 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

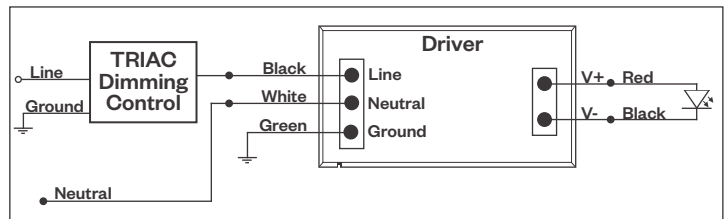
Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

##### 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

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

#### TRIAC Wiring Diagram



#### ELV - Electronic Low Voltage (Reverse Phase) Dimming

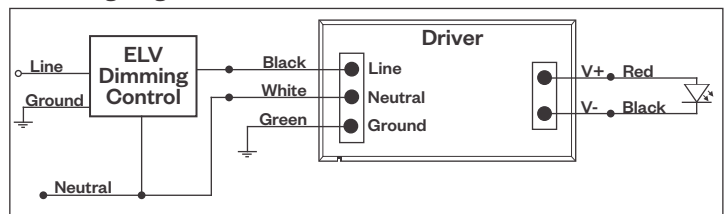
Utilizes specialized "ELV" dimmers.

##### 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 per dimming manufacturer

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"		

#### ELV 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.

# Evoke® 4.75"

## Round Downlight (High Power)



PROJECT:

TYPE:

### Dimming Compatibility *(continued)*

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 ---**

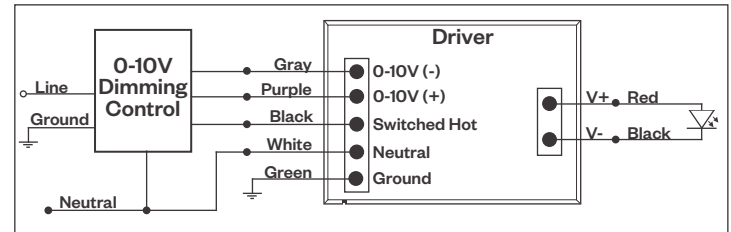
#### 0-10V Dimming

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

##### Central System

Lutron "Diva" - DVSTV	Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface
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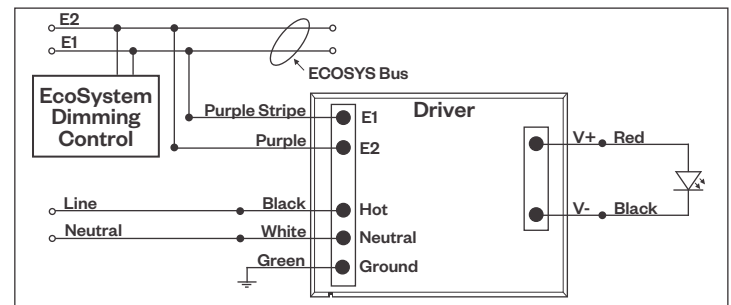
#### Lutron LDE1 Dimming

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!**

#### LDE1 (HILUME-H-ECO) EcoSystem Digital Control Wiring Diagram



#### Compatible Dimmers\*:

##### Lutron ECO System

##### Central System

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

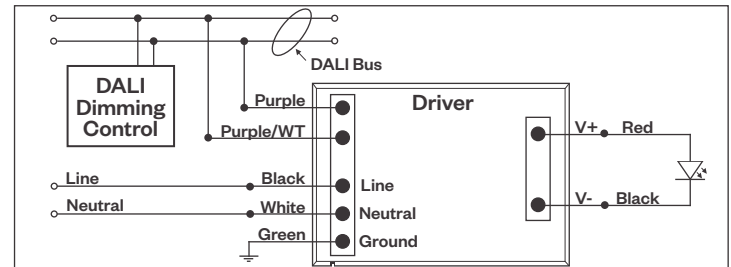
#### DALI Dimming

Digital control protocol allows individual fixture control

##### Notes:

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

#### DALI 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.



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## Emergency Battery Pack

### Wiring Diagram

