

Evoke® 4.75"

Round Downlight



PROJECT:

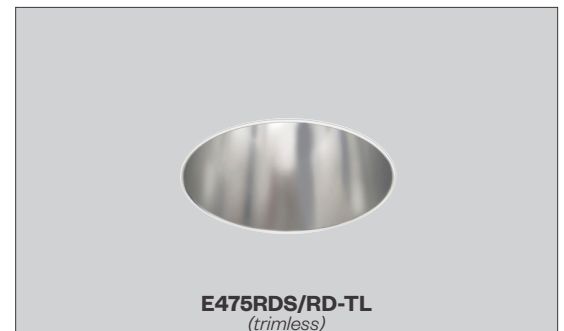
TYPE:

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: 13W, 16W, 21W, 29W
Color Temp: 2200K, 2700K, 3000K, 3500K, 4000K
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
3K Class A LEDs available
Dimming: TRIAC & ELV, 5% Dim, 120/277VAC
Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black, 120/277VAC
0-10V, 1% Dim, 120/277VAC
DALI, 1% Dim, 120/277VAC



Certifications



5 year limited warranty
AMERLUX LED



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
13	947	72.8	3000K-83
16	1170	73.1	3000K-83
21	1515	72.1	3000K-83
29	2104	71.9	3000K-83

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

Data is based on 29W, Wide Flood optics. See pg 6-7 for other performance data..

Electrical Data

	13W		16W		21W*		29W*	
Voltage	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	13	0.11	16	0.13	21	0.18	29	0.24
277V	13	0.05	16	0.06	21	0.08	29	0.10

Electronic constant current LED driver.

*Includes thermal protector, 2W power consumption.

Evoke® 4.75"

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PROJECT:

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Ordering Information - Housing/Frame

1	2	3	4	5	6
1 Model	2 Style	3 Wattage	4 Voltage	5 Driver (for non-dimming, select LE/TE option)	6 Options/Accessories
<u>For New Construction</u> E4.75R-NC-A17 (New Construction) E4.75R-CP-A17 (Chicago Plenum, 13W, 16W & 21W only) E4.75R-IC-A17 (Insulated Ceiling/air tight, 13W, 16W & 21W only)	T - trimmed TL - trimless (not available for use with Grid ceiling)	13 16 21 29 (not for use with CP or IC housings)	120 277 120/277 (for use with IC housing only)	LE/TE TRIAC/ELV dimming, 5% dim HILUME-H-ECO* Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black O-10V 0-10V dimming; 1% dim DALI DALI dimming; 1% dim	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" <i>Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.</i>

Ordering Information - Trim

1	2	3	4	5	6
1 Model	2 Style	3 Finish	4 Beam Spread	5 Color Temp	6 Options/Accessories
E4.75RDS-A17 (shallow trim) E4.75RD-A17	T - trimmed TL - trimless (not available for use with Grid ceiling)	<u>For Trimmed Fixture</u> 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	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	<u>For Trimless Fixture</u> SD semi-diffuse MW matte white 3CLA 3K Class A 229 2200K-90+ 279 2700K-90+ 309 3000K-90+ 359 3500K-90+ 409 4000K-90+
					WET wet location (for trimmed fixture only) SOL solite lens

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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)
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
** 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: 13W, 16W, 21W, 29W
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 8-10 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 (*13W, 16W & 21W only*)
IC/AT rated option (*13W, 16W & 21W only*)
Wet location option (*adds clear lens and trim gasket*)
Title 24 compliant (*13W & 16W 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

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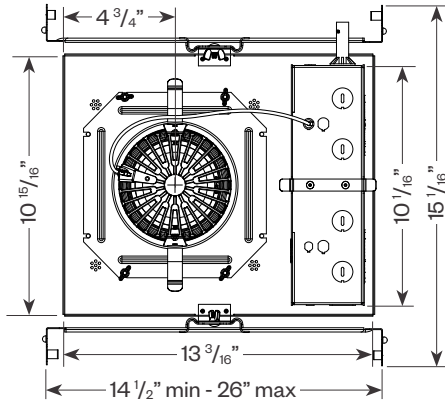
Round Downlight



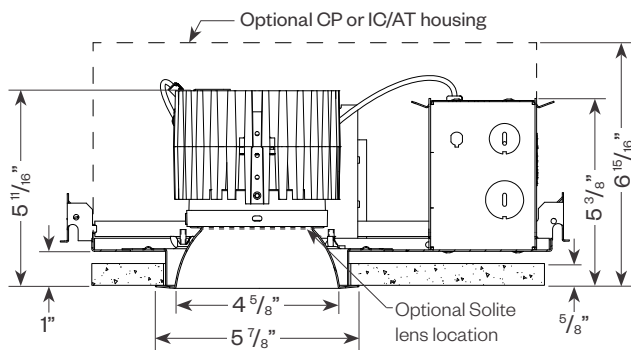
PROJECT:

TYPE:

Product Details - Round Downlight Shallow (RDS)

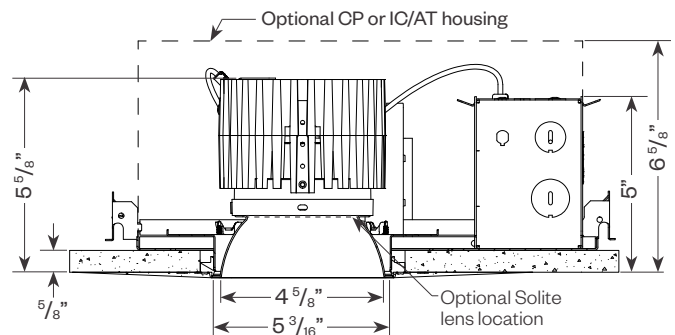


Trimmed



Ceiling cut out: 5 3/8" dia.

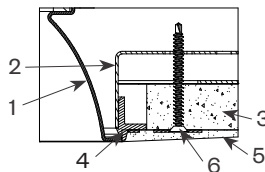
Trimless



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"

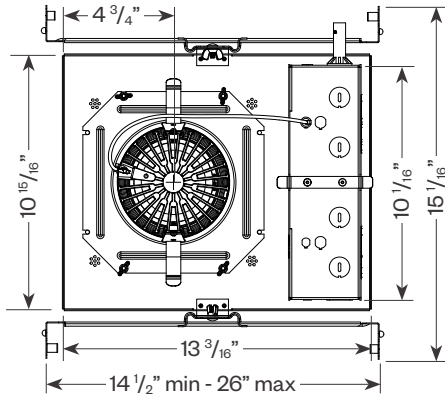
Round Downlight



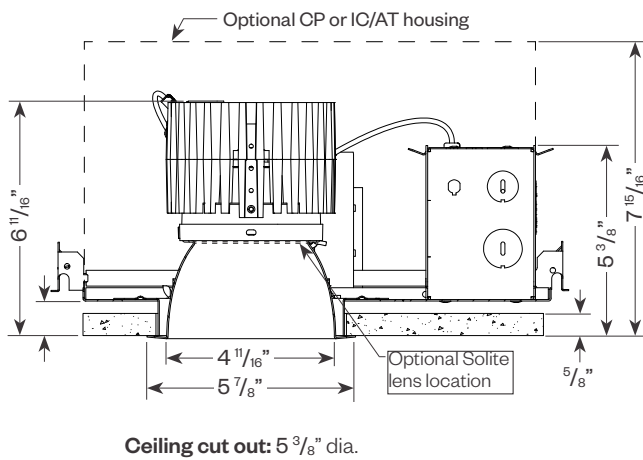
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TYPE:

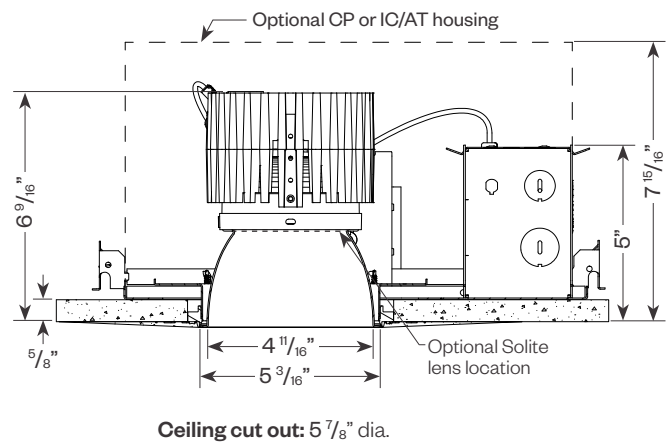
Product Details - Round Downlight (RD)



Trimmed

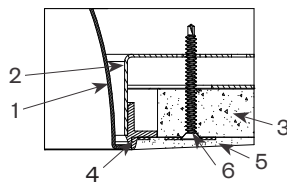


Trimless



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



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PROJECT:

TYPE:

Performance Data

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

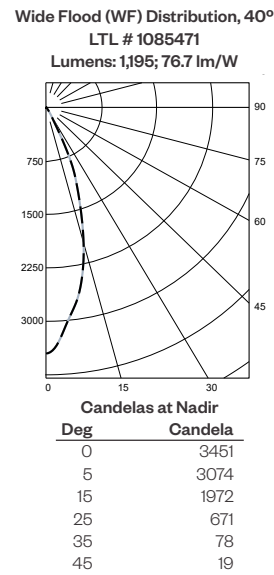
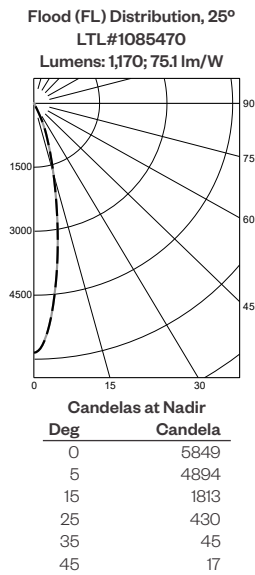
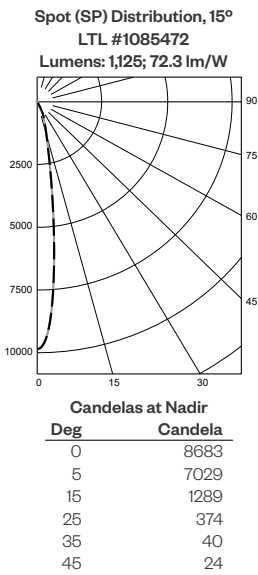
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

Wattage:	13W	16W	21W	29W
Factor:	0.81	1.0	1.3	*

* For 29W data see page 7

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	3CLA
Factor:	0.71	0.80	0.83	0.87	0.90	0.75

16W LED, 3000K-83



Application Data

Notes and Definitions:

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

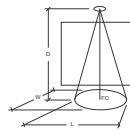
D=Distance to floor or wall.

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'	395	1.3	1.3
	7.5'	176	1.8	1.8
	10.0'	99	2.6	2.6
	12.5'	63	3.2	3.2

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Flood	5.0'	235	1.8	1.8
	7.5'	104	2.9	2.9
	10.0'	59	3.7	3.7
	12.5'	38	4.7	4.7

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Wide Flood	5.0'	138	2.8	2.8
	7.5'	62	4.1	4.1
	10.0'	35	5.5	5.5
	12.5'	22	6.9	6.9



Delta Intelligent Building Technologies

Evoke® 4.75"

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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

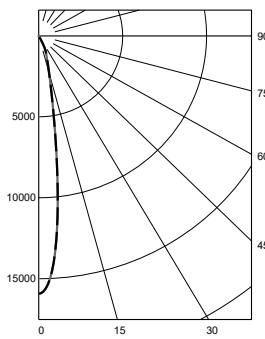
Wattage:	13W	16W	21W	29W
Factor:	0.45	*	0.72	1.0

* For 16W data see page 6

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	3CLA
Factor:	0.71	0.80	0.83	0.87	0.90	0.75

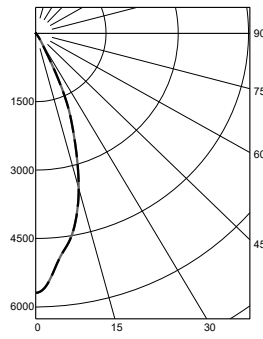
29W LED, 3000K-83

Spot (SP) Distribution, 15°
LTL #1085473
Lumens: 1,950; 66.5 lm/W



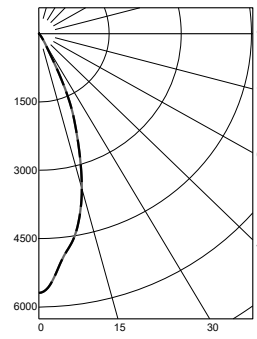
Candelas at Nadir	
Deg	Candela
0	15930
5	12010
15	2227
25	698
35	74
45	34

Flood (FL) Distribution, 25°
LTL #1085475
Lumens: 2,089; 71.4 lm/W



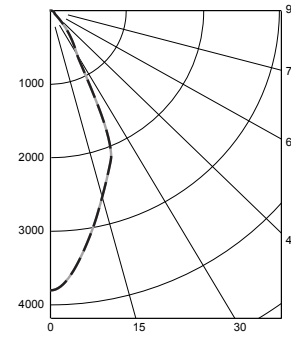
Candelas at Nadir	
Deg	Candela
0	10520
5	8749
15	3274
25	801
35	69
45	25

Wide Flood (WF) Distribution, 40°
LTL #1085474
Lumens: 2,104; 71.9 lm/W



Candelas at Nadir	
Deg	Candela
0	5693
5	5088
15	3518
25	1239
35	135
45	27

Very Wide Flood (VWF) Distribution, 70°
LTL #11644246.01
Lumens: 2,311; 75.9 lm/W



Candelas at Nadir	
Deg	Candela
0	3803
5	3533
15	2608
25	1566
35	481
45	158

Application Data

Notes and Definitions:

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

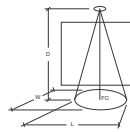
D=Distance to floor or wall.

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'	722	1.3	1.3
	7.5'	308	1.8	1.8
	10.0'	170	2.7	2.7
	12.5'	107	3.3	3.3

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Flood	5.0'	477	1.7	1.7
	7.5'	203	2.8	2.8
	10.0'	112	3.6	3.6
	12.5'	71	4.6	4.6

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Wide Flood	5.0'	259	2.8	2.8
	7.5'	110	4.2	4.2
	10.0'	61	5.6	5.6
	12.5'	39	7.2	7.2

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Very Wide Flood	5.0'	159	3.5	3.5
	7.5'	70	5.3	5.3
	10.0'	39	7.1	7.1
	12.5'	25	9.0	9.0

Evoke® 4.75"

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PROJECT:

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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 ---

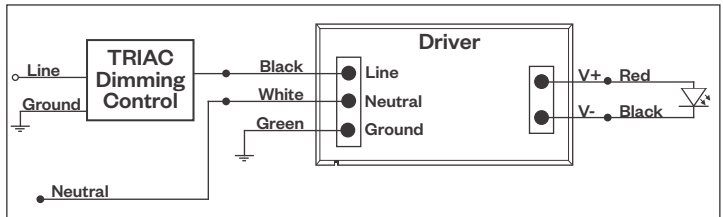
TRIAC (Forward Phase) Dimming

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

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"	

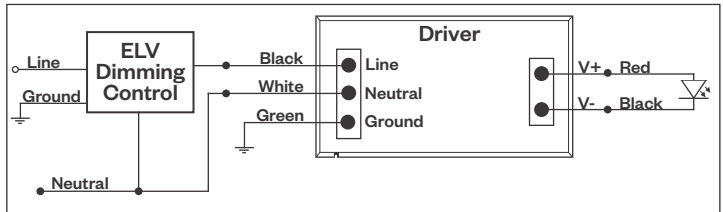
ELV - Electronic Low Voltage (Reverse Phase) Dimming

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

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 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.



Delta Intelligent Building Technologies

Evoke® 4.75"

Round Downlight



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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.

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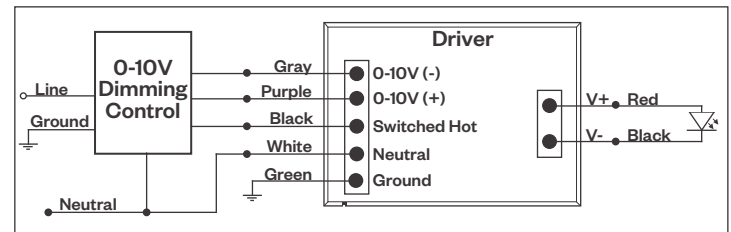
0-10V Dimming

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-TVI 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!**

Compatible Dimmers*:

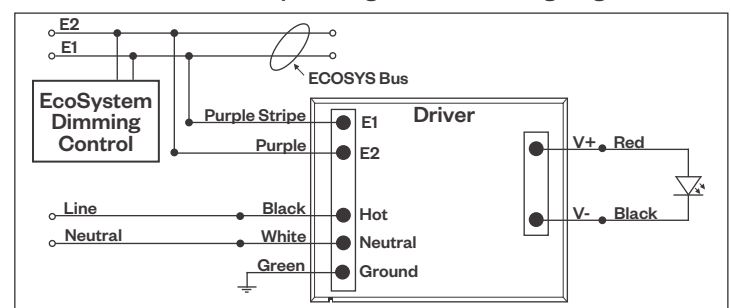
Lutron ECO System

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

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



DALI Dimming

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)

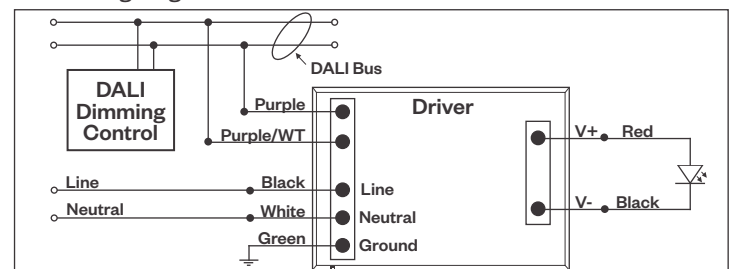
Leviton CD250 Controller

Central System

Dynalite

Fifth Light

DALI Wiring Diagram



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

