

Evoke® 4.75"

Square 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.



E475SDX

Product Overview

Type: Recessed Square 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
 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	2186	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 120V IES files available on website.

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

Electrical Data

Voltage	27W		36W		42W		48W	
	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.

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Ordering Information - Housing/Frame

1	2	3	4	5	6
1 Model 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 Style T - trimmed TL - trimless (not available for use with Grid ceiling)	3 Wattage 27 36 (not for use with CP or IC housings) 42 (not for use with CP or IC housings) 48 (not for use with CP or IC housings, or HILUME-H-ECO driver)	4 Voltage 120 277 120/277 (for use with IC housing only)	5 Driver (for non-dimming, select LE/TE option) LE/TE TRIAC/ELV dimming, 5% dim (for 36W LE/TE dimming, 120V only) HILUME-H-ECO Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black 0-10V 0-10V dimming; 1% dim DALI DALI dimming; 1% dim	6 Options/Accessories 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" Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.

Ordering Information - Trim

1	2	3	4	5	6
1 Model E4.75SDX-A17	2 Style T - trimmed TL - trimless (not available for use with Grid ceiling)	3 Finish 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 Beam Spread SP spot, 15° FL flood, 25° WF wide flood, 40° VWF very wide flood, 70°	5 Color Temp 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 Options/Accessories 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
Formed aperture plate with 5/8" lip
Integral adjustable locking mounting bars
Thermally protected
Die-cast lamp housing and heatsink
Cast aluminum plaster frame with perforated face (*for trimless option*)

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* 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 8-10 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

Emergency Battery Pack (EM)

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

Evolve[®] 4.75"

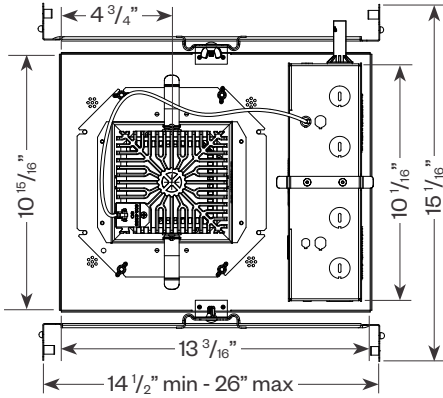
Square Downlight (High Power)



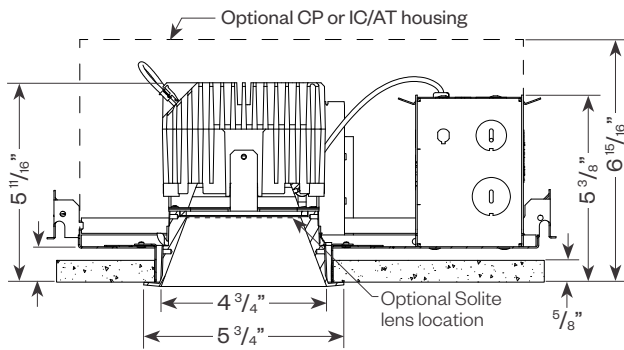
PROJECT:

TYPE:

Product Details - Square Downlight (SD)

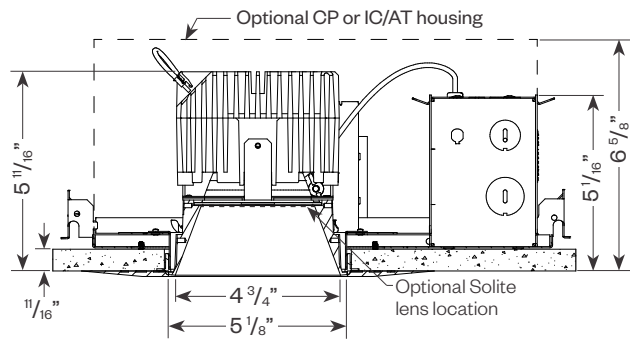


Trimmed



Ceiling cut out: 5 1/8" sq.

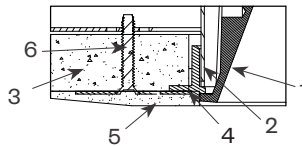
Trimless



Ceiling cut out: 5 7/8" sq.

Plaster Frame Installation Detail (for trimless fixture only)

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



Evolve[®] 4.75"

Square Downlight (High Power)



PROJECT:	TYPE:
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Performance Data

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

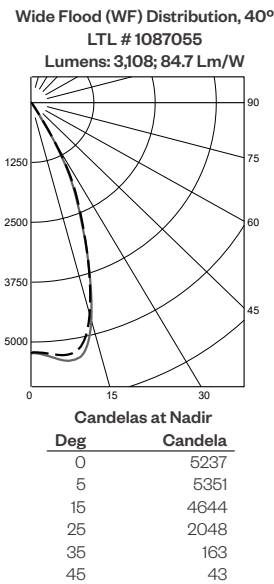
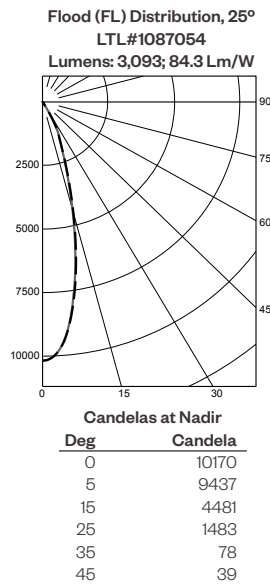
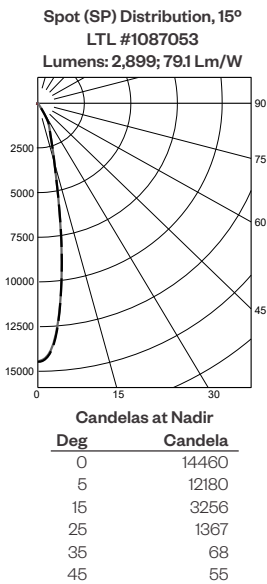
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

Wattage:	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



Application Data

Notes and Definitions:

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

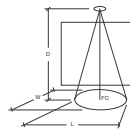
D=Distance to floor or wall.

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'	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

Evolve[®] 4.75"

Square Downlight (High Power)



PROJECT:	TYPE:
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Performance Data

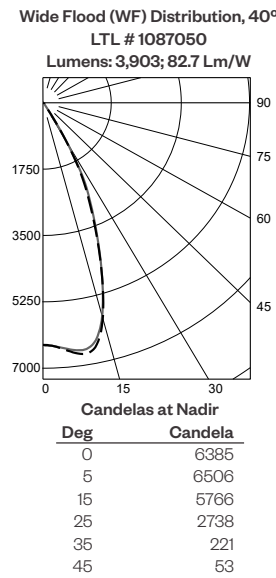
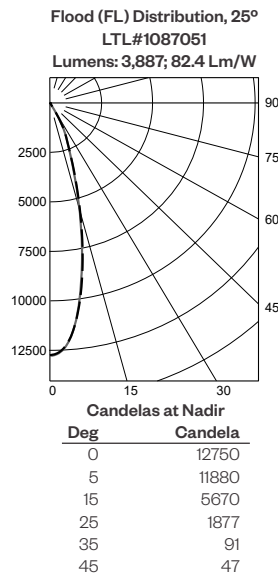
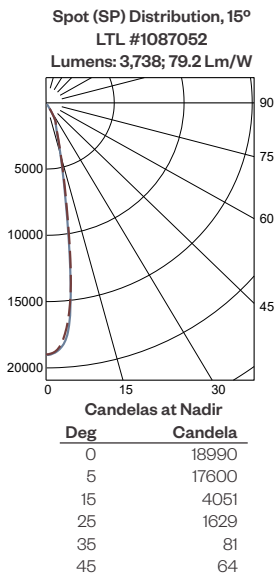
Multiplying Factors: (Multiplying Factor is based on 3000K-83 120V IES file on website)

CCT:	2700K-83	3000K-83	3500K-83	4000K-83	Wattage:	27W	36W	42W	48W
Factor:	0.96	1.0	1.02	1.04	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).

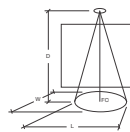
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FC=Footcandles on floor or wall at center beam aiming location.

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'	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

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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 ---

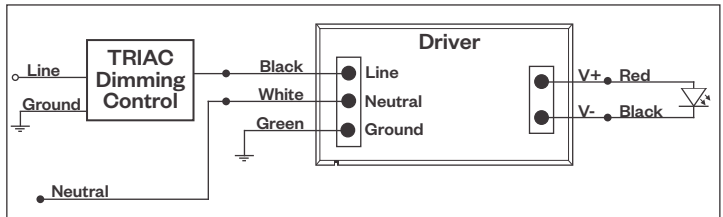
TRIAC (Forward Phase) Dimming

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"	

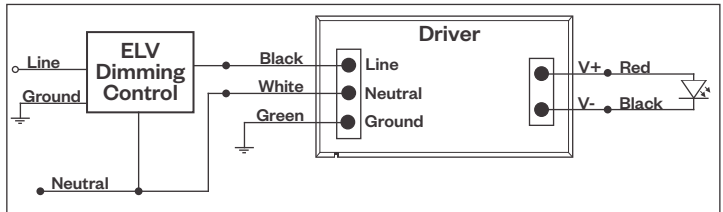
ELV - Electronic Low Voltage (Reverse Phase) Dimming

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.

Evoke® 4.75"

Square Downlight (High Power)



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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 ---

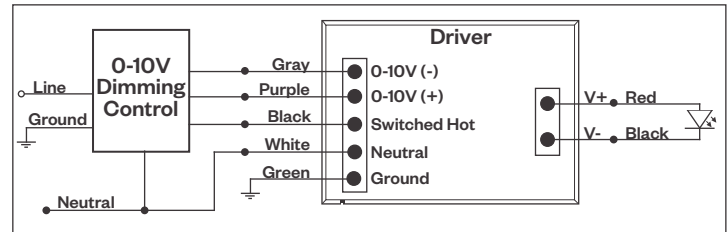
0-10V Dimming

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

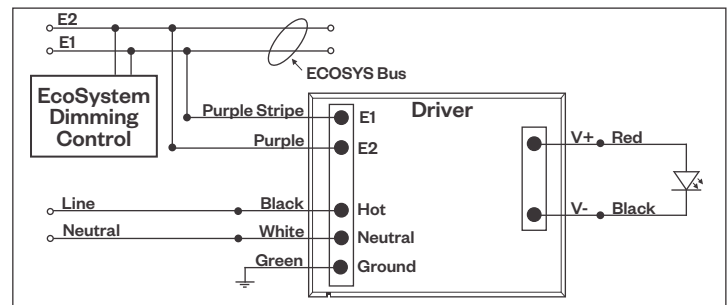
Lutron LDE1 Dimming

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	

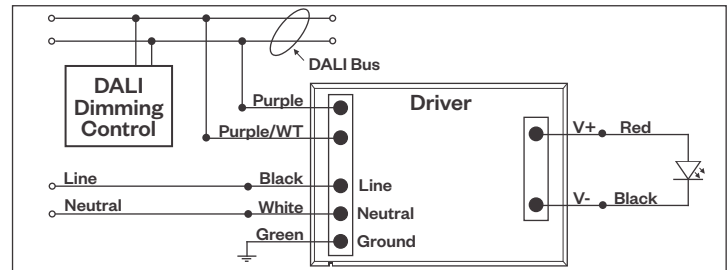
DALI Dimming

Digital control protocol allows individual fixture control

Notes:

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

DALI Wiring Diagram



Compatible Dimmers*:	
Wall Box (3-Wire Fluorescent)	Central System
Leviton CD250 Controller	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 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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PROJECT:

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Emergency Battery Pack

Wiring Diagram

