Evoke® 4.75"

Round Downlight (High Power)



Downlight



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

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 LDE1 Hi-lume® 1% 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		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







Evoke® 4.75"

4.75" Round Downlight (High Power)



PROJECT:

Housing/Frame Ordering Information

3 4 1 5 6

Model 1

For New Construction

E4.75RX-NC-A17[†] (New Construction)

E4.75RX-CP-A17[†] (Chicago Plenum, 27W only)

E4.75RX-IC-A17[†] (Insulated Ceiling/air tight, 27W only)

<u>Style</u> 2

T - trimmed

TL - trimless (not available for use with Grid ceiling)

3 **Wattage**

27

36 (not available for use with CP or IC housing)

42 (not available for use with CP or IC housing)

48 (not available for use with CP or IC housing, or HILUME-H-ECO driver)

Voltage 4

120

277

120/277 (for use with IC housing only)

Driver (for non-dimming, select LE/TE option)

LE/TE - TRIAC/ELV dimming (for 36W LE/TE dimming, 120V only)

HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/

Fade-to-Black (not available for 48W)

0-10V - 0-10V dimming, 1% dim

DALI - DALI dimming, 1% dim

Options

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"

Trim Ordering Information

3 4 5 1 2 6

Model

E4.75RDSX-A17⁺ (shallow trim)

E4.75RDX-A17[†]

Style

T - trimmed

TL - trimless (not available for use with Grid ceiling)

3 Finish

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

Beam Spreads

SP - spot, 15°

FL - flood, 25°

WF - wide flood, 40°

VWF - very wide flood, 70°

Color Temp

83 CRI 90+ CRI

27 - 2700K-83 **229** - 2200K-90+ **CRISP** - CrispWhite

3CLA - 3K Class A **30** - 3000K-83 **279** - 2700K-90+

35 - 3500K-83 309 - 3000K-90+

40 - 4000K-83 **359** - 3500K-90+

409 - 4000K-90+

Options/Accessories

WET - wet location (for trimmed fixture only)

SOL - 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.



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 LDE1 Hi-lume® 1% Soft-On/Fade-to-Black (not available for 48W)

DALI dimming, 1% dim

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 (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)

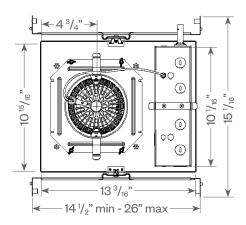
Warranty

5 year limited warranty

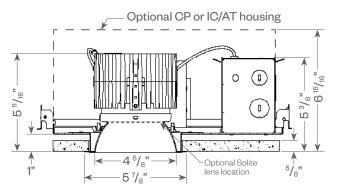


PROJECT:

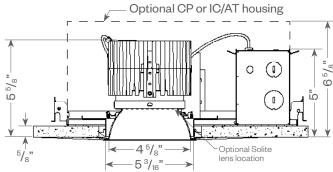
Evoke Round Downlight Shallow:



Trimless Trimmed



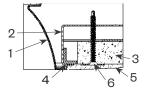
Ceiling cut out: 5 3/8" dia.



Ceiling cut out: 5 7/8" dia.

Plaster Frame Installation Detail (for trimless fixture only)

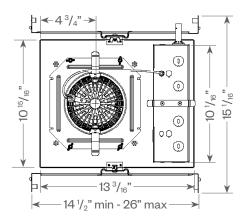
- 1. Reflector Trim
- 2. Aperture plate
- 3. Ceiling
- 4. Cast Aluminum Plaster Frame
- 5. Plaster Skim Coat (by others)
- 6.6-32 Type F Thread Cutting Screw



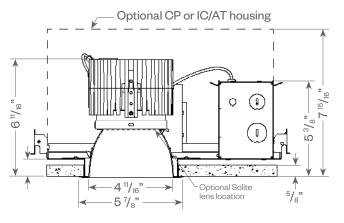


PROJECT:

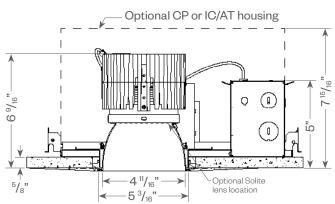
Evoke Round Downlight:



Trimless Trimmed



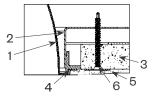
Ceiling cut out: 5 3/8" dia.



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





PROJECT: TYPE:

Evoke Round Downlight:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83120V IES file on website)

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

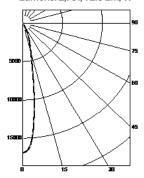
*For 48W data see page 7

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

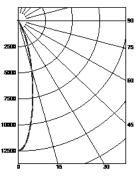
Spot (SP) Distribution, 15° LTL #1087061 Lumens: 2,761; 72.6 Lm/W



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

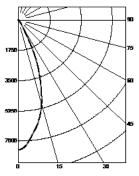


Candelas at Nadir

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

Wide Flood (WF) Distribution, 40° LTL # 1087060

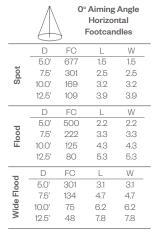
LIL#1087060 Lumens: 3,016; 79.4 Lm/W

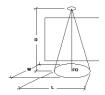


Candelas at Nadir

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

Application Data:





Notes and Definitions:

Beam spread is to 50% center beam candle power (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). \mathbf{W} =Effective Visual Beam width in feet (50% of maximum footcandle level).

CB=Distance across or down to center beam location.



PROJECT:

Evoke Round Downlight:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83120V IES file on website)

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

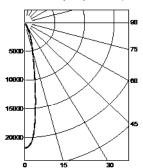
*For 36W data see page 6

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

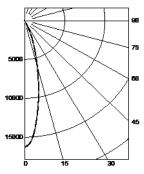
Spot (SP) Distribution, 15° LTL #1087056 Lumens: 3,499; 74.4 Lm/W



Candelas at Nadir

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

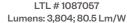
Flood (FL) Distribution, 25° LTL#1087058 Lumens: 3,775; 79.9 Lm/W

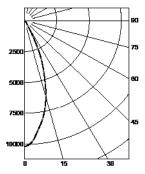


Candelas at Nadir

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

Wide Flood (WF) Distribution, 40° LTL # 1087057

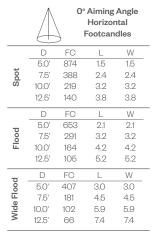


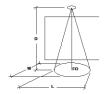


Candelas at Nadir

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

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



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

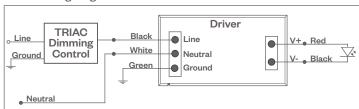
Notes:

- 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



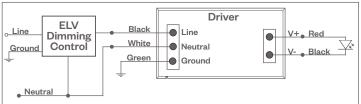
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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

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 manufacturer 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.



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 ---

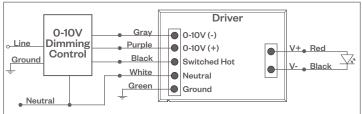
0-10V DIMMING

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

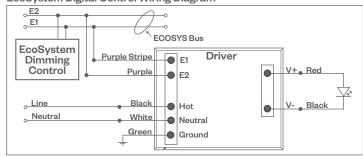
Integrates into Lutron EcoSystem building management

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!

Lutron 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

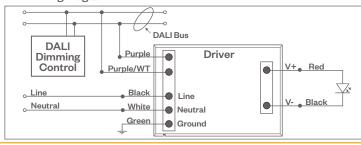
Notes:

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

Compatible Dimmers[†]:

Wall Box (3-Wire Fluorescent)	Central System
Leviton CD250 Controller	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 manufacturer 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.



PROJECT: TYPE:

EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram

