# Essenza® HP

## 2000 LM Square Downlight

amerlux
A Delta Group Company

## Features

Essenza HP LED Downlights are designed to deliver high punch of light for high ceilings and high ambient applications. The shallow frame (only 3-1/8" plenum depth*) is universal to accept either the round or square Essenza HP downlight trims.

* New construction only (see pg 4&5 for CP & REM requirements)

## Product Overview

| | |
|---|---|
| Type: | Recessed Square Downlight |
| Wattage: | 23 |
| Lumen Output: | 2048 lm (WF optic, 3000K, 83 CRI) |
| 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 available |
| Dimming: | TRIAC & ELV (120/277VAC) - 5% Dim |
| | Lutron Hi-lume® H Series/EcoSystem - 1% dim with soft on, fade to black, 120/277VAC |
| | 0-10V (120/277VAC) - 1% Dim |
| | DALI dimming - 1% Dim |

**PROJECT:**

**TYPE:**

**Trimless**

~~PRODUCT DISCONTINUED~~
~~Replacement Product: Hornet HP Select~~

## Fixture Type

| New Construction | Remodeler | Trim | Trimless |
|---|---|---|---|
| Yes | Yes | Yes | Yes |

## Performance Chart

| Wattage | Delivered Lumens | LPW | Color Temp |
|---|---|---|---|
| 23 | 2048 | 89 | 3000K-83 |

*Data based on Wide Flood optic, 3000K-83 ies files available on website.*
*See page 6 for other performance data.*

## Electrical Data

| | 23W | |
|---|---|---|
| | System Watts | Amps |
| 120V | 23 | 0.19 |
| 277V | 23 | 0.08 |

*Electronic constant current LED driver*
*Includes 2W thermal protector*

CSA C US

**3** year limited warranty
AMERLUX LED

Amerlux reserves the right to change details that do not affect overall function and performance.
Amerlux®, LLC • 178 Bauer Drive, Oakland, NJ 07436 • P: 973-882-5010  F: 973-882-2605 • amerlux.com

# Essenza® HP

## 2000 Lumen Square Downlight

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**PROJECT:**                        **TYPE:**

## Housing/Frame Ordering Information

_____._____._____._____._____._____

      **1**          **2**    **3**    **4**      **5**      **6**

**1 Model**
**For New Construction**
**EZ-HP-NC-A17†** (New Construction)
**EZ-HP-CP-A17†** (Chicago Plenum (CCEA) housing)

**For Existing Ceilings**
**EZ-HP-REM-A17†** (Remodeler, for existing ceilings)

**2 Style**
**T** - trimmed
**STL** - square trimless

**3 Wattage**
**23**

**4 Voltage**
**120**
**277**

**5 Driver** (for non-dimming, select LE/TE option)
**LE/TE** - TRIAC/ELV dimming, 5% dim
**HILUME-H-ECO** - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black
**0-10V** - 0-10V dimming, 1% dim
**DALI** - DALI dimming, 1% dim

**6 Options/Accessories**
**EM** - integral emergency battery pack with remote test switch, requires 7" ceiling clearance (not available for use with REM or CP option)

## Trim Ordering Information

_____._____._____._____._____

      **1**      **2**    **3**    **4**    **5**

**1 Model**
**EZ-HP-SD-A17†** (downlight)

**2 Style**
**T** - trimmed
**TL** - trimless

**3 Finish**

| Trimmed | Trimless |
|---|---|
| **MWW** - matte white, white flange | **MW** - matte white |
| **SLVW** - matte silver, white flange | |

For other finishes consult factory, specify internal cone and trim ring finishes separately

**4 Beam Spreads**
**NF** - narrow flood, 21°
**WF** - wide flood, 45°
**VWF** - very wide flood, 60°

**5 Color Temp**

| | | |
|---|---|---|
| **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+ | |

† 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.

# Essenza® HP

## 2000 Lumen Square Downlight

**PROJECT:**         **TYPE:**

## Specifications

**Application**

Hospitality, retail and commercial ambient

**Construction**

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets (not for use with Remodeler version)
Cast aluminum plaster frame with perforated face (for trimless version only)
Die-cast optical housing, trim and heatsink

**Optical**

Molded acrylic TIR optic
**Beam spreads:**
Narrow Flood, 21º; Wide Flood, 45º;
Very Wide Flood, 60º

**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 (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:** 23
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.**
*Note: Drivers are universal but thermal protector is voltage specific*

**Drivers**

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron DALI systems also available
*See pages 7-8 for more dimming information*

**Finish**

Powder coat paint
*Consult factory for custom finishes*

**Mounting**

Trimmed
For use in T-grid or sheetrock ceilings, max thickness 1"
Trimless
For use in sheetrock ceilings, max thickness 5/8"

**Certifications**

CSA listed to UL standards
Damp location
Chicago Plenum (CCEA) optional

**Warranty**

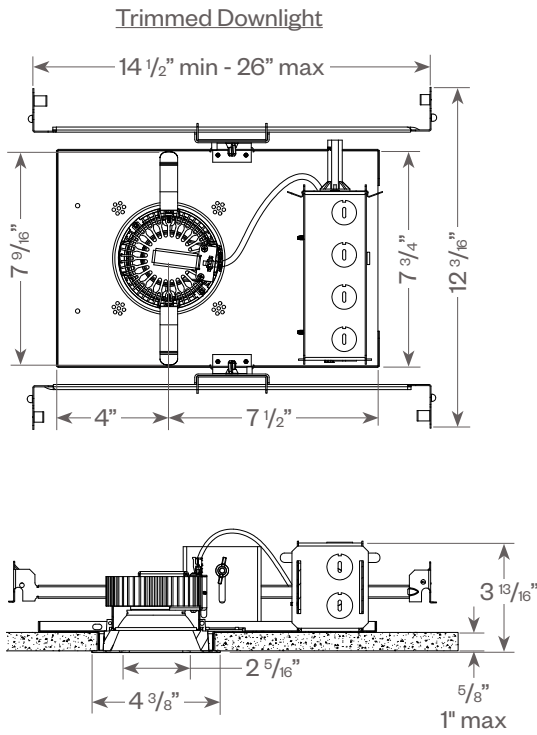3 year limited warranty
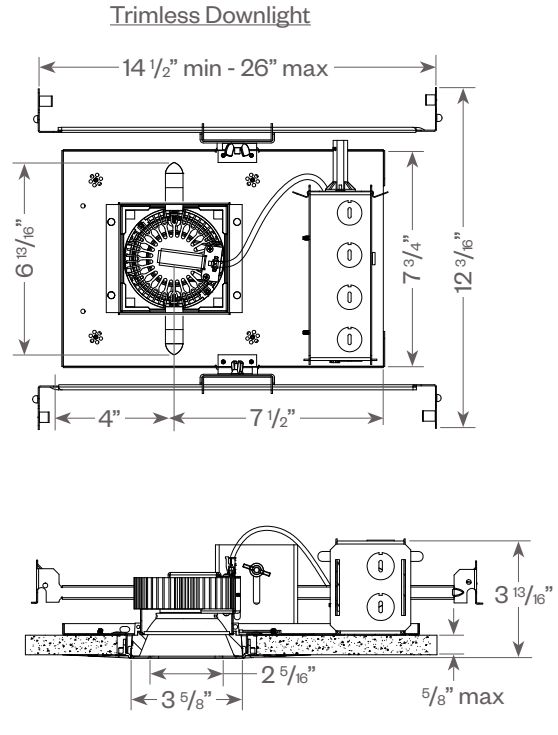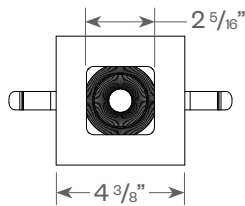
# Essenza® HP
## 2000 Lumen Square Downlight

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**PROJECT:**         **TYPE:**

## Essenza 2000 LM Square Downlight:

### Trimmed Downlight



14 $\frac{1}{2}$" min - 26" max

7 $\frac{9}{16}$"

7 $\frac{3}{4}$"

12 $\frac{3}{16}$"

4"

7 $\frac{1}{2}$"

3 $\frac{13}{16}$"

2 $\frac{5}{16}$"

4 $\frac{3}{8}$"

$\frac{5}{8}$"

1" max

**Ceiling cut out:** 4"

2 $\frac{5}{16}$"

4 $\frac{3}{8}$"

### Trimless Downlight



14 $\frac{1}{2}$" min - 26" max

6 $\frac{13}{16}$"

7 $\frac{3}{4}$"

12 $\frac{3}{16}$"

4"

7 $\frac{1}{2}$"

3 $\frac{13}{16}$"

2 $\frac{5}{16}$"

3 $\frac{5}{8}$"

$\frac{5}{8}$" max

**Ceiling cut out:** 4 $\frac{1}{2}$"

### Plaster Frame Detail

2 $\frac{3}{4}$"

3 $\frac{5}{8}$"

Aperture Plate    Screw

Plaster Frame    Ceiling

Fixture Trim

Plaster Skim Coat (by others)



## Optional CP Housing



13 $\frac{5}{16}$"

11 $\frac{1}{2}$"

13 $\frac{3}{16}$"

11 $\frac{5}{8}$"

7 $\frac{3}{4}$"

13 $\frac{1}{4}$"

11 $\frac{5}{8}$"

7 $\frac{5}{8}$"

7 $\frac{13}{16}$"

13 $\frac{3}{8}$"

13 $\frac{1}{4}$"

7 $\frac{3}{16}$"
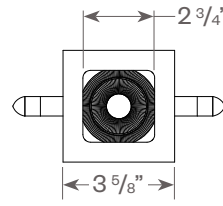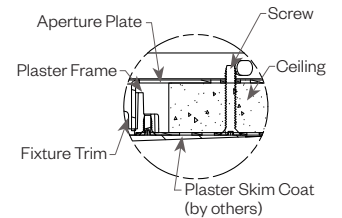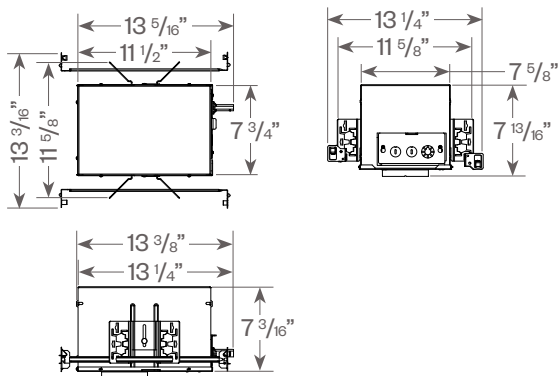
## Frame with Emergency Battery Pack



7 $\frac{3}{4}$"

11 $\frac{7}{8}$"

7 $\frac{1}{2}$"

Emergency Battery Pack

5 $\frac{1}{2}$"

3 $\frac{1}{8}$"

$\frac{5}{8}$"

Ceiling

11 $\frac{1}{2}$"

13 $\frac{9}{16}$"

14 $\frac{1}{2}$" min - 26 max
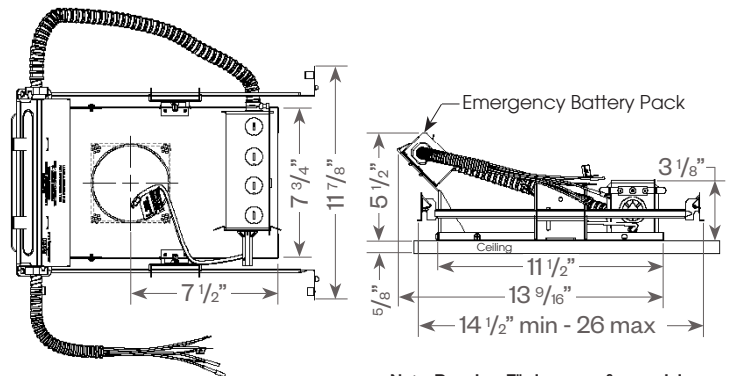
**Note: Requires 7" clearance for servicing.**

# Essenza® HP

2000 Lumen Square Downlight
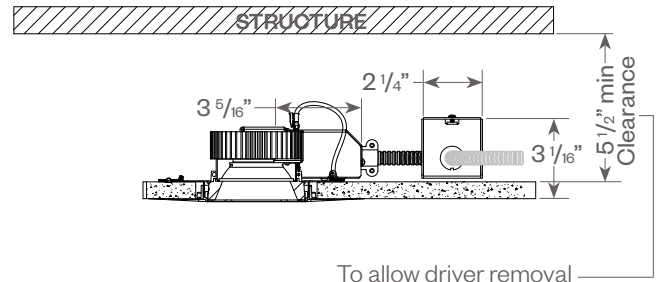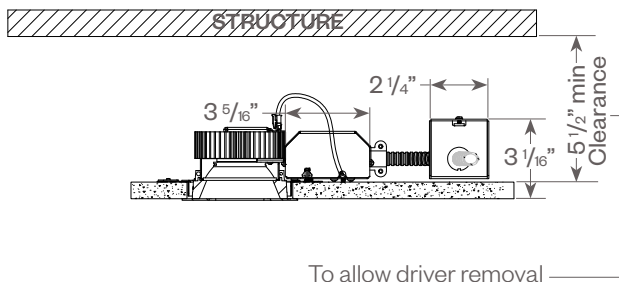
**amerlux**
A Delta Group Company

**PROJECT:**

**TYPE:**
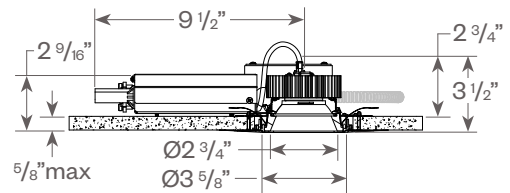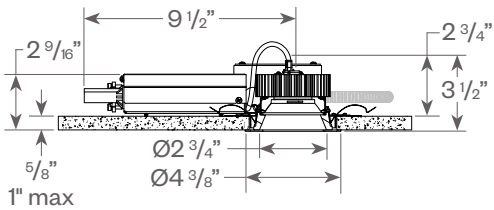
## Essenza 2000 LM Round Downlight Remodeler:

### Trimmed Downlight
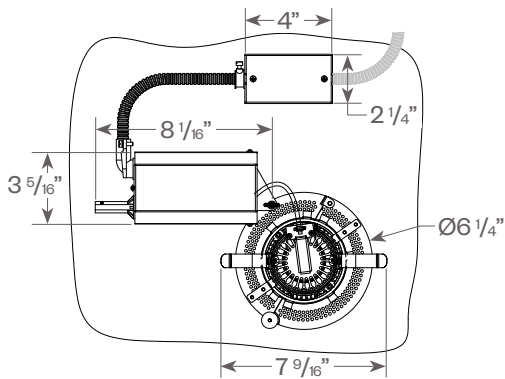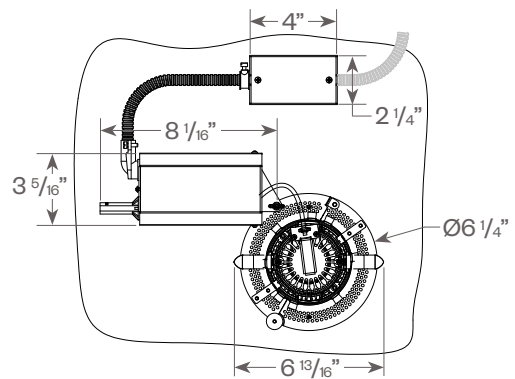
4"

8 $^1/_{16}$"

3 $^5/_{16}$"

2 $^1/_4$"

Ø6 $^1/_4$"

7 $^9/_{16}$"

STRUCTURE

3 $^5/_{16}$"

2 $^1/_4$"

3 $^1/_{16}$"

5 $^1/_2$" min Clearance

To allow driver removal through cut out.

9 $^1/_2$"

2 $^9/_{16}$"

2 $^3/_4$"

3 $^1/_2$"

$^5/_8$"

1" max

Ø2 $^3/_4$"

Ø4 $^3/_8$"

**Ceiling cut out:** 4" dia.

Ø4 $^3/_8$"

Ø2 $^3/_4$"

### Trimless Downlight

4"

8 $^1/_{16}$"

3 $^5/_{16}$"

2 $^1/_4$"

Ø6 $^1/_4$"

6 $^{13}/_{16}$"

STRUCTURE

3 $^5/_{16}$"

2 $^1/_4$"

3 $^1/_{16}$"

5 $^1/_2$" min Clearance

To allow driver removal through cut out.

9 $^1/_2$"

2 $^9/_{16}$"

2 $^3/_4$"

3 $^1/_2$"

$^5/_8$"max

Ø2 $^3/_4$"

Ø3 $^5/_8$"

**Ceiling cut out:** 4 $^1/_2$" dia.

Ø3 $^5/_8$"

Ø2 $^3/_4$"

#### Plaster Frame Detail

Aperture Plate

Screw

Ceiling

Fixture Trim

Plaster Frame

Plaster Skim Coat (by others)

# Essenza® HP

## 2000 Lumen Square Downlight

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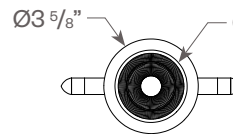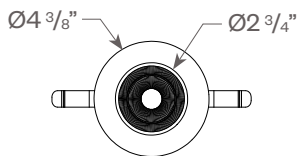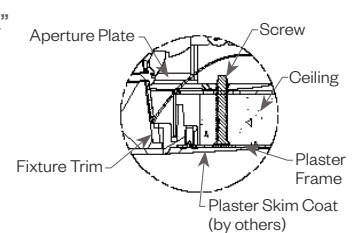
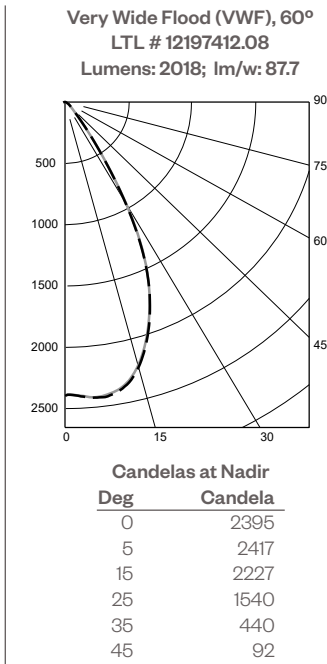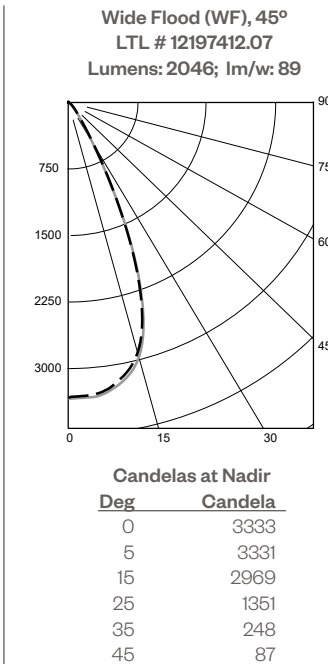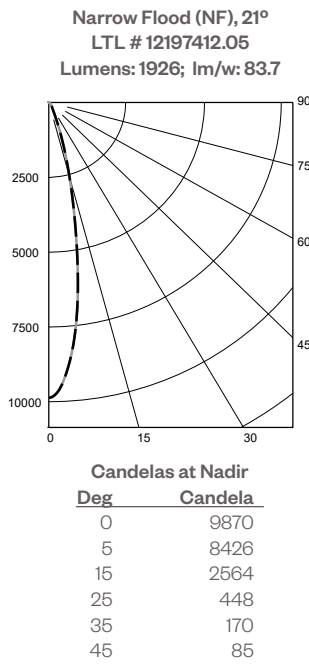**PROJECT:**                    **TYPE:**

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

**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 |

| 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 |

### 23W LED, 3000K-83

**Narrow Flood (NF), 21°**
**LTL # 12197412.05**
**Lumens: 1926; lm/w: 83.7**



**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 9870 |
| 5 | 8426 |
| 15 | 2564 |
| 25 | 448 |
| 35 | 170 |
| 45 | 85 |

**Wide Flood (WF), 45°**
**LTL # 12197412.07**
**Lumens: 2046; lm/w: 89**



**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 3333 |
| 5 | 3331 |
| 15 | 2969 |
| 25 | 1351 |
| 35 | 248 |
| 45 | 87 |

**Very Wide Flood (VWF), 60°**
**LTL # 12197412.08**
**Lumens: 2018; lm/w: 87.7**



**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 2395 |
| 5 | 2417 |
| 15 | 2227 |
| 25 | 1540 |
| 35 | 440 |
| 45 | 92 |

### Application Data:

**0° Aiming Angle**
**Horizontal**
**Footcandles**

**Narrow Flood**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 396 | 1.7 | 1.7 |
| 7.5' | 176 | 2.8 | 2.8 |
| 10.0' | 99 | 3.6 | 3.6 |
| 12.5' | 64 | 4.6 | 4.6 |

**Wide Flood**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 134 | 3.9 | 3.8 |
| 7.5' | 60 | 5.9 | 5.7 |
| 10.0' | 34 | 7.9 | 7.8 |
| 12.5' | 22 | 9.9 | 9.7 |

**Very Wide Flood**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 109 | 4.3 | 4.3 |
| 7.5' | 47 | 6.5 | 6.5 |
| 10.0' | 26 | 8.9 | 8.9 |
| 12.5' | 17 | 11.2 | 11.2 |
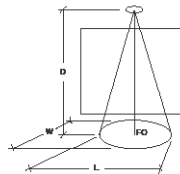


**Notes and Definitions:**

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.

# Essenza® HP

## 2000 Lumen Square Downlight

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A Delta Group Company

**PROJECT:**　　　　　　　　　　　　　　**TYPE:**

**DIMMING COMPATIBILITY**:

Amerlux® Essenza 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 ---
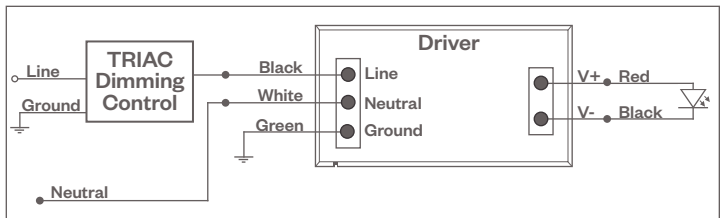
### TRIAC (Forward Phase) DIMMING (Standard)

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

**TRIAC Wiring Diagram**



**Compatible Dimmers†:**

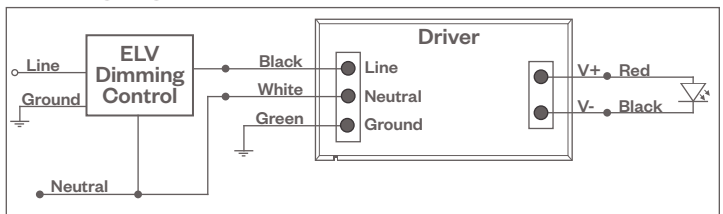| Wall Box (TRIAC 120VAC) | Central System |
|---|---|
| Lutron "Diva" | Lutron "GP" Panel |
| Lutron "Nova-T" | Lutron Grafik Eye QS |
| Lutron "Maestro" | |
| Lutron "Vareo" | |
| Lutron "Skylark" | |

### 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 "Vareo" | | |
| 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.

# Essenza® HP
## 2000 Lumen Square Downlight

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PROJECT:                                    TYPE:

EZ-HP Square Downlight

**DIMMING COMPATIBILITY**:
Amerlux® Essenza 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

**0-10V Wiring Diagram**



**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!
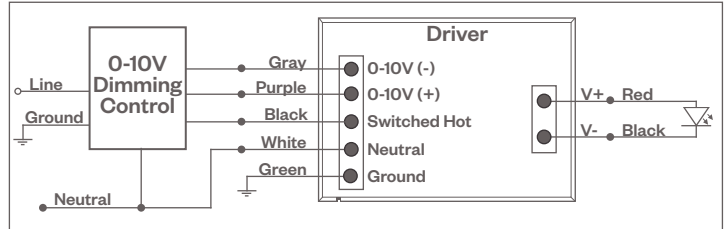
**Compatible Dimmers†:**

| Wall Box | | Central System |
|---|---|---|
| Lutron "Diva" - DVTV with PP-120H Interface | Leviton Renoir II 0-10V | Lutron Grafik Eye with GRX-TVI Interface |

### LUTRON H-SERIES / ECOSYSTEM DIMMING
Integrates into Lutron EcoSystem building management

**HILUME-H-ECO, HILUME-5-ECO**
**EcoSystem Digital Control Wiring Diagram**



**Notes:**
- 120VAC or 277VAC*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
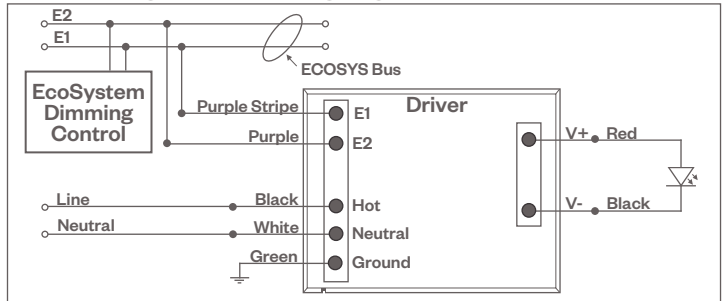
**Compatible Dimmers†:**

| Lutron ECO System | 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

**DALI Wiring Diagram**



**Notes:**
- 120VAC - 277VAC*
- Dims down to 1% light output in most cases
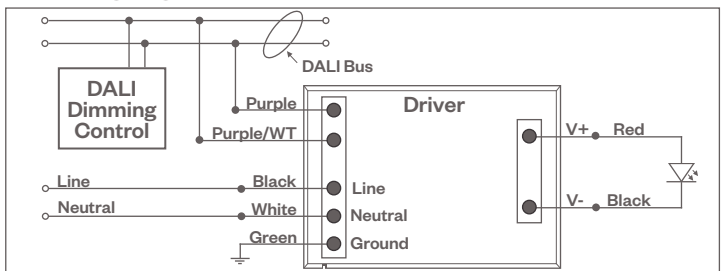
**Compatible Dimmers†:**

| Wall Box (3-Wire Fluorescent) | Central System |
|---|---|
| Leviton CD250 Controller | Dynalite |
| | Fifth Light |

**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.