Hornet® HP
Square Glass Downlight

amerlux
A Delta Group Company

Features

The Hornet 3.5" Square Glass Downlight helps define architectural spaces with a decorative, satin opal, etched glass cylinder that breaks the ceiling plane, providing a warm glow ideal for ambient and task lighting.

Product Overview

Type:	Recessed Square Downlight
Wattage:	13, 18, 20
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K, CRISP
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K)
	90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
	CrispWhite (18W max) & 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 (120/277VAC) - 1% Dim

PROJECT:

TYPE:

Fixture Type

Round/Square	New Construction	Trim
Yes	Yes	Yes

See separate spec sheet for Round trim

Electrical Data

	13W		18W		20W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	13	0.11	18	0.15	20	0.17
277V	13	0.05	18	0.06	20	0.07

Electronic constant current LED driver

CSA
C US

5 year limited warranty
AMERLUX LED

Hornet® HP

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Housing/Frame Ordering Information

_____ . __T__ . _____ . _____ . _____ . _____

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

1 Model
For New Construction
HDL-HP-S-NC-A17⁺ (New Construction)
HDL-HP-S-CP-A17⁺ (Chicago Plenum (CCEA) housing)
HDL-HP-S-IC-A17⁺ (Insulated Ceiling/air tight, 13W & 18W only)

For Existing Ceilings
HDL-HP-S-REM-A17⁺ (Remodeler)

2 Style
T - trimmed

3 Wattage
13
18
20 (not for use with IC housing)

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
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 - emergency battery pack with remote test switch (not available for use with REM, CP or IC options)

Trim Ordering Information

___**HDL-HP-SG-A17**___ . __T__ . _____ . _____

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

1 Model
HDL-HP-SG-A17⁺

2 Style
T - trimmed

3 Finish
SONA-BN - satin opal glass with brushed nickel ring
SONA-MW - satin opal glass with matte white ring

4 Color Temp

83 CRI	90+ CRI	
27 - 2700K-83	**229** - 2200K-90+	**CRISP** - CrispWhite
30 - 3000K-83	**279** - 2700K-90+	(18W max)
35 - 3500K-83	**309** - 3000K-90+	**3CLA** - 3K Class A
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.

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PROJECT: **TYPE:**

Specifications

Application
Retail and commercial decorative ambient lighting

Construction
20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets (not for Remodeler version)
Die-cast optical housing
Laser cut steel trim
Extruded aluminum and die-cast heat sink
Blow molded satin opal etched glass

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, 18W max
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: 13, 18, 20
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 and DALI systems also available
See pages 6-8 for more dimming information

Finish
Powder coat paint/wet paint
Consult factory for custom finishes

Mounting
For use in T-grid or sheetrock ceilings, 5/8" - 2" standard
26" Hanger bars included (except for Remodeler versions)
Consult factory for hanger bars greater than 26"

Certifications
CSA damp as tested to UL 1598 standards
IC/AT rated (optional)
Damp location

Warranty
5 year limited warranty

Emergency Battery Pack (EM)
Powers fixture at 5.1 watts (approx. 400 Lm) for 90 minutes (not for use with REM, CP or IC/AT versions)
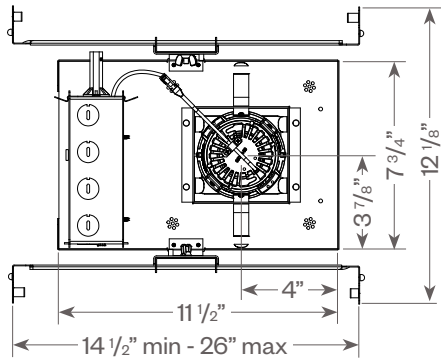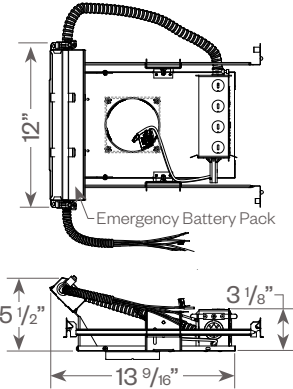
Hornet® HP
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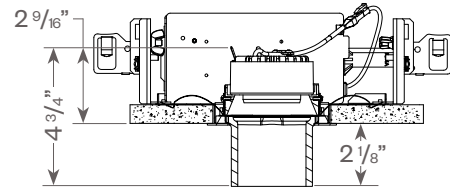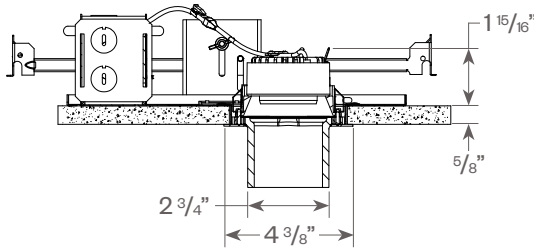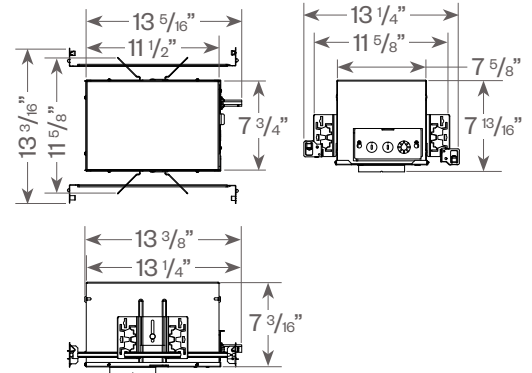**PROJECT:**   **TYPE:**

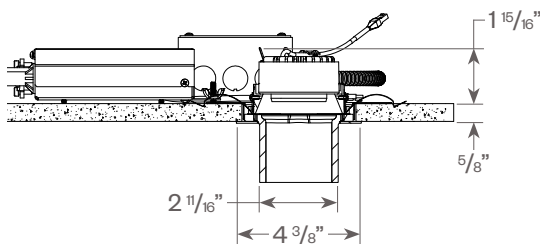## Hornet HP Square Glass Downlight:

Frame with Emergency Battery Pack

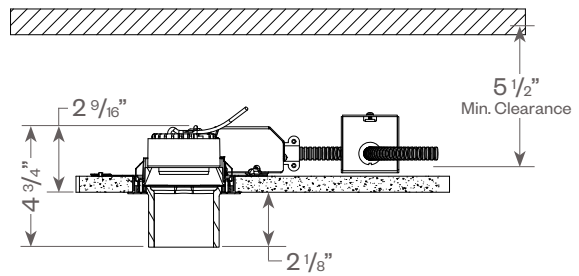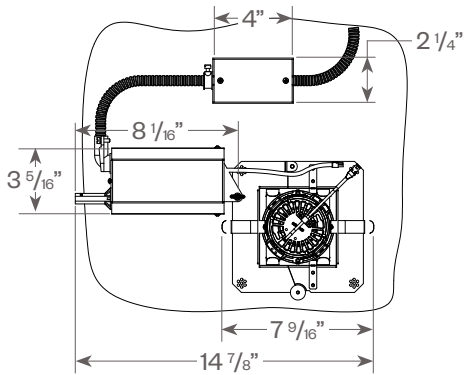

Emergency Battery Pack

Optional CP or IC/AT housing

Ceiling cut out: 4" x 4" sq.

Hornet HP Square Glass Downlight Remodeler:

5 ½"
Min. Clearance

Ceiling cut out: 4" sq.

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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)

Wattage:	13W	18W	20W
Factor:	0.72	1.0	1.11

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

18W LED, 3000K-83

LTL #11900704.01
Lumens: 1063
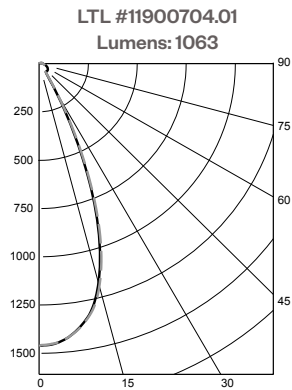
Candelas at Nadir

Deg	Candela
0	1461
5	1436
15	1163
25	473
35	69
45	55

Application Data:

Notes and Definitions:
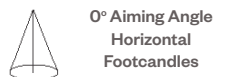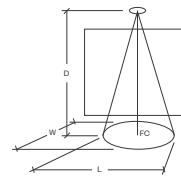
Beam spread is to 50% center beam candlepower (CBCP).
D=Distance to floor or wall.
FC=Footcandles on floor or wall at center beam aiming location.
L=Effective Visual Beam length in feet (50% of maximum footcandle level).
W=Effective Visual Beam width in feet (50% of maximum footcandle level).
CB=Distance across or down to center beam location.

0° Aiming Angle
Horizontal
Footcandles

D	FC	L	W
5.0'	57	3.6	3.6
7.5'	26	5.4	5.5
10.0'	15	7.3	7.3
12.5'	10	9.2	9.3

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PROJECT: **TYPE:**

DIMMING COMPATIBILITY:

Amerlux® Hornet 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 ---
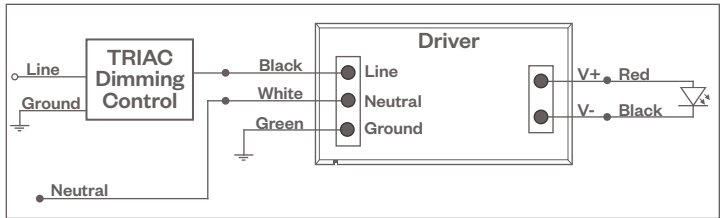
TRIAC (Forward Phase) DIMMING (Standard)

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

TRIAC Wiring Diagram

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 "Vareo"	
Lutron "Skylark"	

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

Utilizes specialized "ELV" dimmers.

ELV Wiring Diagram

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
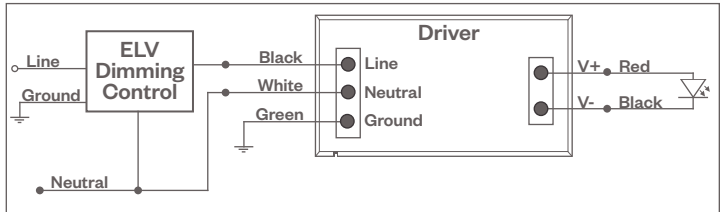
Compatible Dimmers†:

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.

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PROJECT: TYPE:

DIMMING COMPATIBILITY:

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### --- 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
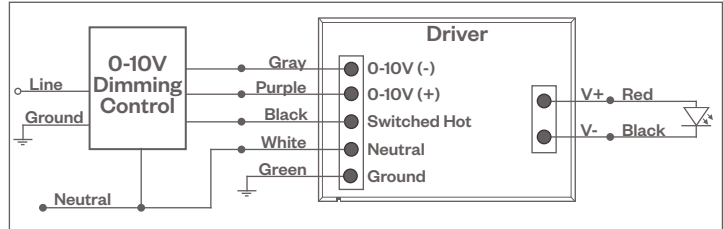
Compatible Dimmers†:

| Wall Box		Central System
Lutron "Diva" - 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

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

HILUME-H-ECO, HILUME-5-ECO
EcoSystem Digital Control Wiring Diagram
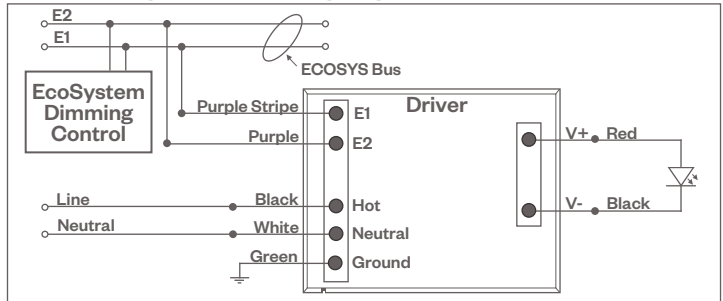
Compatible Dimmers†:

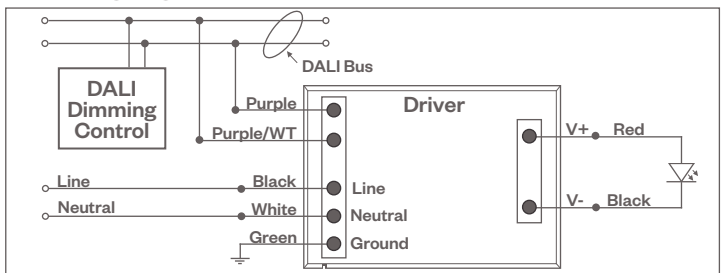| Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

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 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.

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PROJECT: **TYPE:**

EMERGENCY DIMMING (-EM OPTION)
Wiring Diagram