

Hornet[®] HP

Square Glass Downlight



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 (120V/277V) - 5% Dim Lutron Hi-lume [®] H Series/EcoSystem - 1% dim with soft on, fade to black, 120V/277V 0-10V (120V/277V) - 1% Dim DALI (120V/277V) - 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



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PROJECT:

TYPE:

Housing/Frame Ordering Information

		T			
1	2	3	4	5	6
1 <u>Model</u> For New Construction HDL-HP-S-NC-A17[†] (New Construction) HDL-HP-S-CP-A17[†] (Chicago Plenum (COEA) housing) HDL-HP-S-IC-A17[†] (Insulated Ceiling/air tight, 13W & 18W only) For Existing Ceilings HDL-HP-S-REM-A17[†] (Remodeler)	2 <u>Style</u> T - trimmed	3 <u>Wattage</u> 13 18 20 (not for use with IC housing)	4 <u>Voltage</u> 120 277 120/277 (for use with IC housing only)	5 <u>Driver</u> (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 O-10V - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim	6 <u>Options/Accessories</u> 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 <u>Model</u> HDL-HP-SG-A17[†]	2 <u>Style</u> T - trimmed	3 <u>Finish</u> SONA-BN - satin opal glass with brushed nickel ring SONA-MW - satin opal glass with matte white ring	4 <u>Color Temp</u> 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, 120V/277V 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 5-6 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)

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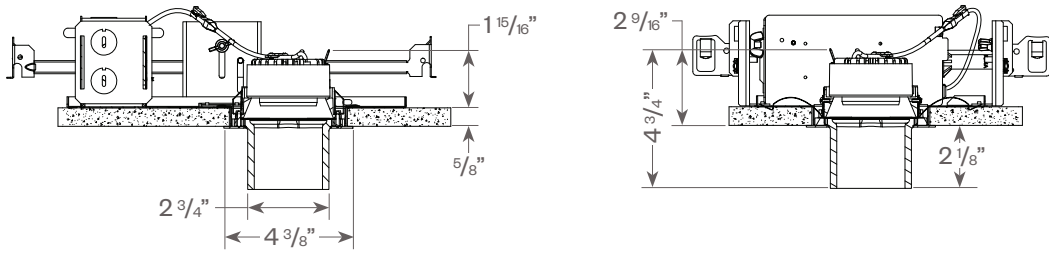
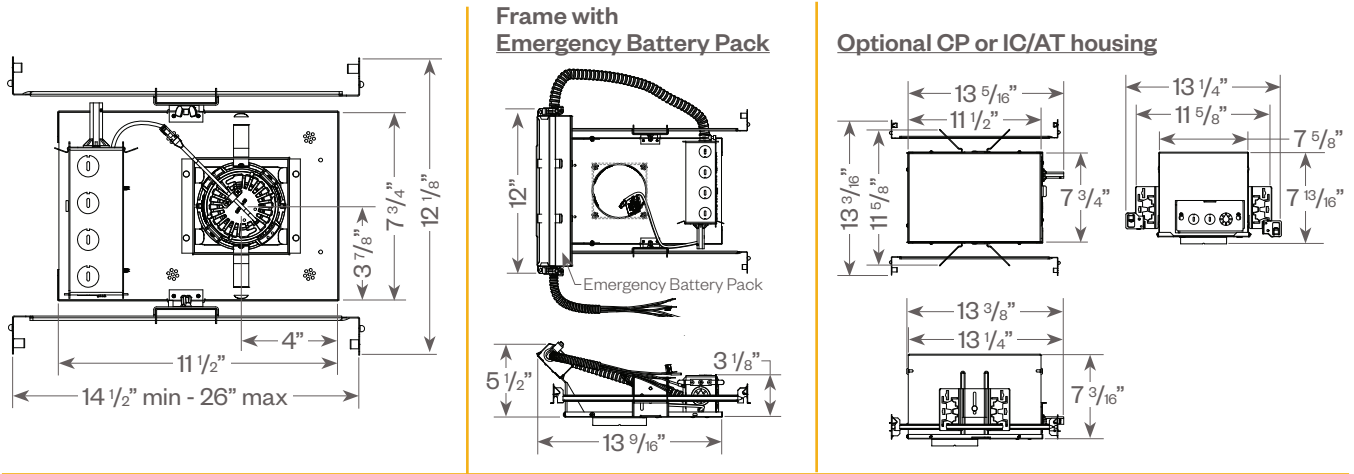
Square Glass Downlight



PROJECT:

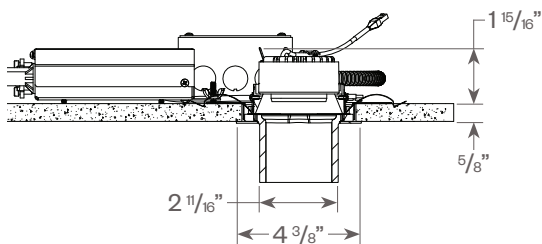
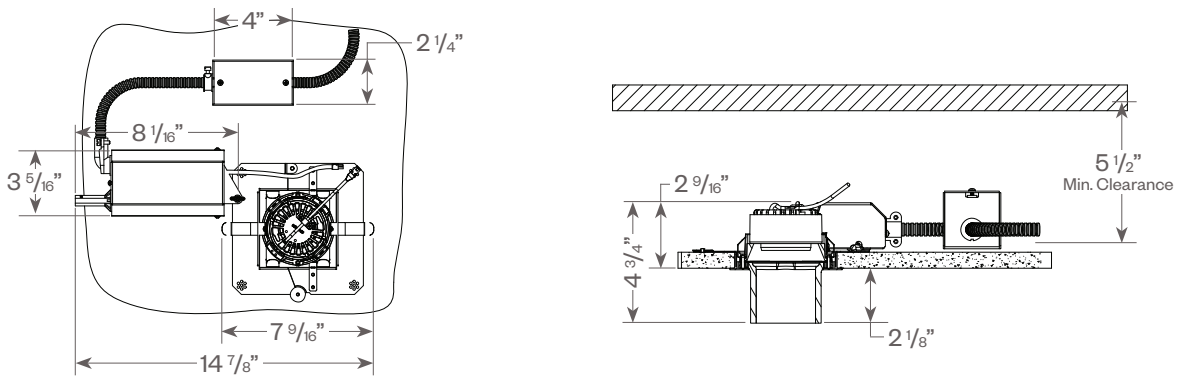
TYPE:

Hornet HP Square Glass Downlight:



Ceiling cut out: 4" x 4" sq.

Hornet HP Square Glass Downlight Remodeler:



Ceiling cut out: 4" sq.

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Square Glass Downlight



PROJECT:

TYPE:

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

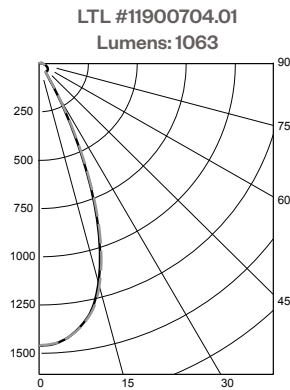
MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

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



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).

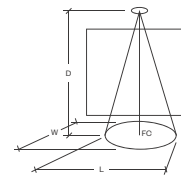
D=Distance to floor or wall.

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 ---

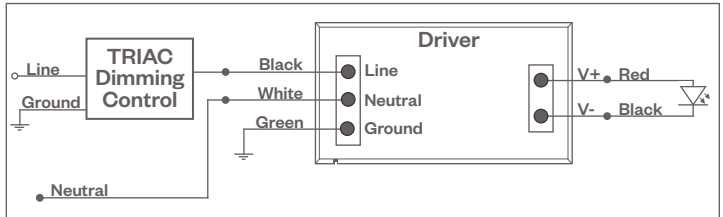
TRIAC (Forward Phase) DIMMING (Standard)

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

Notes:

- 120V or 277V*
- Dims down to less than 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 (Incandescent Style, Wattage as required)		Central System
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

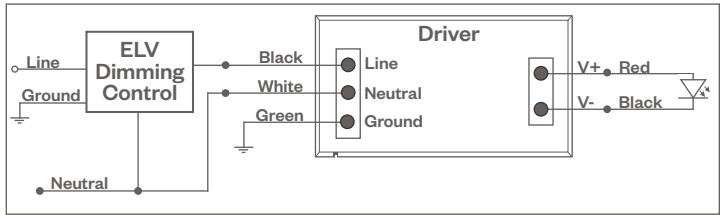
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

- 120V or 277V*
- Dims down to less than 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 Style)		Central System
Lutron "Diva"	Leviton "Surslide"	Lutron "GP" Panel with PHPM-PA Interface
Lutron "Nova-T"	Leviton "Vizio"	Lutron Grafik Eye QS with PHPM-PA Interface
Lutron "Maestro"		
Lutron "Vareo"		
Lutron "Skylark"		

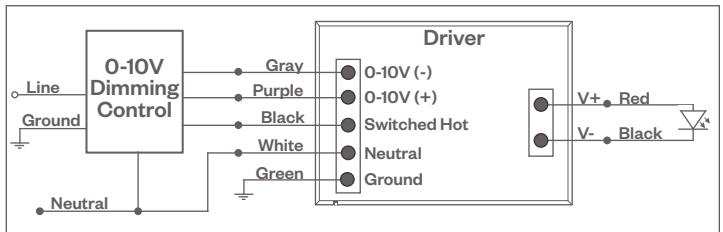
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120V or 277V*
- 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

Notes:

- * Driver is 277V dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120V wiring colors and method. Please refer to 277V dimmer installation instructions for 277V 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:

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.

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LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

Integrates into Lutron EcoSystem building management

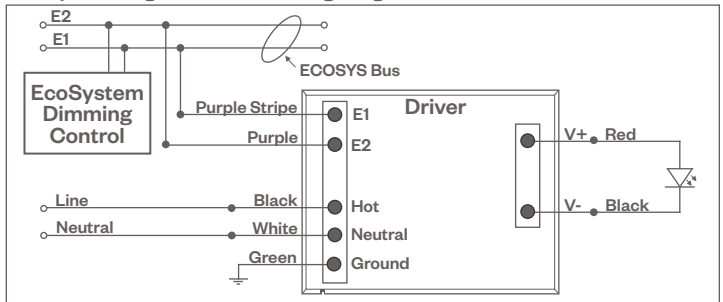
Notes:

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

Compatible Dimmers†:

Wall Box	Central System
Lutron "Diva"	Lutron EcoSystem compatible controls
Lutron "Nova-T"	
Lutron "Maestro"	
Lutron "Vareo"	

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



DALI DIMMING (-DALI OPTION)

Digital control protocol allows individual fixture control

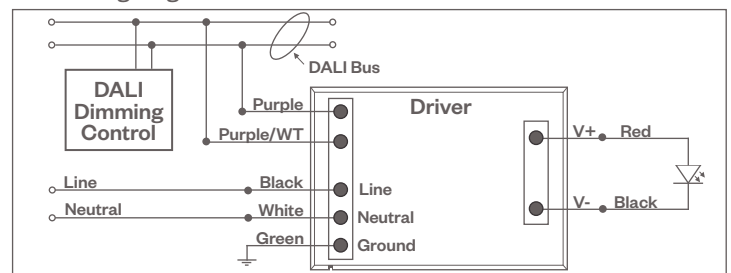
Notes:

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

Compatible Dimmers†:

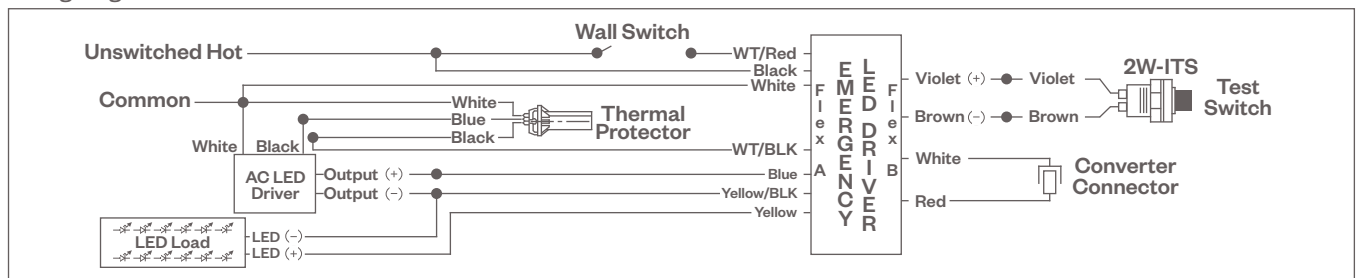
Wall Box (3-Wire Fluorescent)	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

DALI Wiring Diagram



EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram



Notes:

- * Driver is 277V dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120V wiring colors and method. Please refer to 277V dimmer installation instructions for 277V wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.