



## **Features**

The Hornet 3.5" Round 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 Round Downlight

Wattage: 13, 18, 20

Lumen Output: 763 max; 45 Lm/W

CBCP: 847 max

**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 Square trim

# **Performance Chart**

Watts	Delivered Lumens	LPW	СВСР	Color Temp
13	549	42	610	3000K-83
18	763	45	847	3000K-83
20	847	43	940	3000K-83

Data is based on 3000K-83 IES files available on website All wattage and LPW includes 2W thermal protector

## **Electrical Data**

	13W		18W		20W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	13	O.11	18	0.15	20	0.17
277V	13	0.05	18	0.06	20	0.07

Electronic constant current LED driver









## Housing/Frame Ordering Information 1 2 3 4 5 6 **Model Voltage** 4 120 For New Construction HDL-HP-R-NC-A17<sup>†</sup> (New Construction) 277 HDL-HP-R-CP-A17<sup>†</sup> (Chicago Plenum (CCEA) housing) 120/277 (for use with IC housing only) HDL-HP-R-IC-A17<sup>†</sup> (Insulated Ceiling/air tight, 13W & <u>Driver</u> (for non-dimming, select LE/TE option) 18W only) **LE/TE** - TRIAC/ELV dimming For Existing Ceilings HILUME-H-ECO - Lutron Hi-lume® H Series, EcoSystem, HDL-HP-R-REM-A17<sup>†</sup> (Remodeler) 1% dim with soft on, fade to black **0-10V** - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim <u>Style</u> T - trimmed Options/Accessories EM - emergency battery pack with remote test switch **Wattage** 13 (not available for use with REM, CP or IC options) 18 20 (not for use with IC housing) **Trim Ordering Information** HDL-HP-RG-A17 3 4 2 Model HDL-HP-RG-A17<sup>†</sup> Style T - trimmed Finish SONA-BN - satin opal glass with brushed nickel ring **SONA-MW** - satin opal glass with matte white ring 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+

<sup>†</sup> 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.



## **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

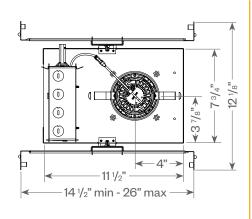
## **Emergency Battery Pack (EM)**

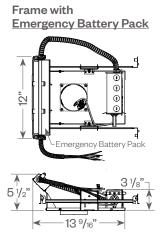
Powers fixture at 5.1 watts (approx.  $400\,Lm$ ) for  $90\,minutes$  (not for use with REM, CP or IC/AT versions)

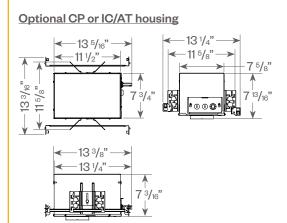


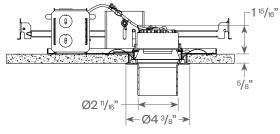


# Hornet HP Round Glass Downlight:

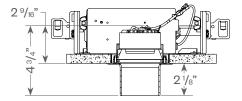




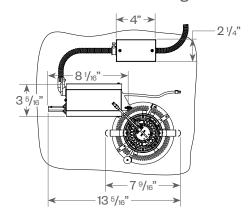


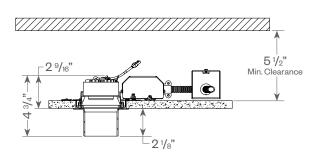


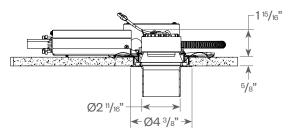




# Hornet HP Round Glass Downlight Remodeler:







Ceiling cut out: 4" dia.

Round Glass Downlight



PROJECT:

# **Hornet HP Round Downlight:**

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

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

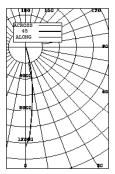
Wattage:	13W	18W	20W
Factor:	0.72	1.0	1.11

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

C	CT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Fa	actor:	0.71	0.80	0.83	0.87	0.90	0.65	0.75

### 18W LED, 3000K-83

### LTL #1204104 Lumens: 763



### Candelas at Nadir

Deg	Candela
0	847
5	833
15	651
25	281
35	99
45	87

# **Application Data:**

## Notes and Definitions:

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

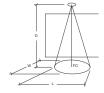
**D**=Distance to floor or wall.

 $\textbf{FC} = \textbf{Footcandles} \ on \ floor \ or \ wall \ at \ center \ beam \ aiming \ location.$ 

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.



$\triangle$	0	° Aiming Horizor Footcan	ntal
D	FC	L	W
5.0'	40	3.2	3.2
7.5'	17	5.0	5.0
10.0'	9	6.8	6.8
12.5'	6	8.7	8.7
	6	8.7	



### 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.

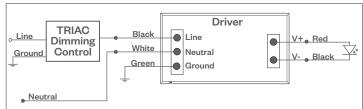
#### Notes:

- 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<sup>†</sup>:

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

## TRIAC Wiring Diagram



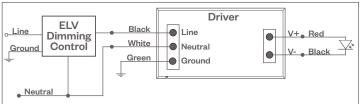
## ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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<sup>†</sup>:

Lutron "Diva" Lutron "Nova-T" Lutron "Maestro" Lutron "Skylark" Leviton Skylark" Leviton Skylark" Leviton "Surslide"  Lutron "Diva" Lutron "GP" Panel with PHPM-PA 120/277VAC Lutron Grafik Eye QS with PHPM-PA 120/277VAC	Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Maestro" Lutron "Vareo" Lutron "Skylark"	Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Vareo" Lutron "Skylark"	Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Skylark"	Lutron "Maestro"		
' l	Lutron "Vareo"		
Leviton "Surslide"	Lutron "Skylark"		
Zeviteri Garando	Leviton "Surslide"		
Leviton "Vizio"	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.

Round Glass Downlight



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 ---

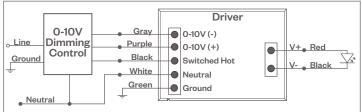
#### 0-10V DIMMING

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<sup>†</sup>:

 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

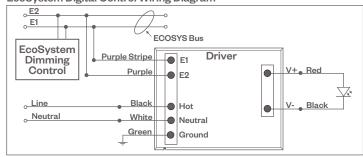
Integrates into Lutron EcoSystem building management

#### 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<sup>†</sup>:

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

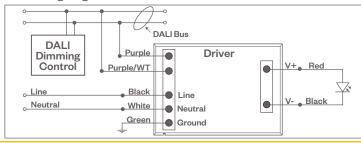
### Notes:

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

# Compatible Dimmers<sup>†</sup>:

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.



# EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram

