

# Hornet® HP

## Round Lensed Downlight



PROJECT:

TYPE:



Trimless version

### Features

Hornet Lensed Downlights are the perfect choice for all general lighting needs. Available in Round or Square apertures, these fixtures meet the needs of commercial and hospitality markets. Optional Solite lensing provides whisper quiet aesthetics. Also available in knife-edge trimless and remodeler. Complementing Hornet Lens Wall Wash fixture available.

### Product Overview

Wattage:	16, 23
Lumen Output:	1,645 max; 72.2 Lm/W (30SOL optic)
CBOP:	4,748 max (30SOL optic)
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K, CRISP
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2200K, 2700K, 3000K) CrispWhite Available
Dimming:	TRIAC & ELV (120V/277V) Lutron Hi-lume® A-Series (120V/277V) 0-10V (120V/277V) - 1% Dim

*\*International version available, see website for spec sheet.*

### Fixture Type

Round/Square	New Construction	Remodeler	Trim	Trimless
Yes	Yes	Yes	Yes	Yes

*See separate spec sheet for Square*

### Performance Chart

Watts	Delivered Lumens	LPW	CBOP	Color Temp	Multiplying Factor
16	1,234	77.1	3,561	3000K	0.75
23	1,645	72.2	4,748	3000K	1.0

*Data is based on 3000K-83 IES files available on website*

*Data is 30SOL optic.*

*All wattage and LPW includes 2W thermal protector*

### Conversion Chart

CCT (83 CRI)	Multiplying Factor	CCT (90+ CRI)	Multiplying Factor
2700K-83	0.96	2200K-90+	0.71
3000K-83	1.0	2700K-90+	0.80
3500K-83	1.02	3000K-90+	0.83
4000K-83	1.04	CRISP	0.65

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## PROJECT:

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### Specifications

#### Application

Retail and commercial ambient lighting

#### Performance

Lumen Output: 1,645; 72.2 Lm/W (23W, 3000K, 30SOL)  
Lumen Maintenance: > 70% of initial lumens at 50,000 hrs  
CBCP: 4,748 (23W, 3000K, 30SOL)

#### Optical

Wattage: 16, 23

Lens Options:

Satin Ice lens for maximum source concealment and wide distribution with a visually "hotter" aperture.  
Solite lens for maximum efficacy and a visually quieter aperture. 30°, 50° and 65° beam spread options.  
Visually best with SLV reflector finish.

Beam spreads:

30SOL, 30° beam with solite lens  
50SOL, 50° beam with solite lens  
65SOL, 65° beam with solite lens  
75SAT, 75° beam with satin ice lens

#### LED

Color Temp Options:

2200K, 2700K, 3000K, 3500K, 4000K

CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)

90+ typ. (2200K, 2700K, 3000K)

CrispWhite LED available (see below \* for description)

R9 Values: 11 (83 CRI), 55 (92 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.*

#### Electrical

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 damage is not covered under warranty.**

**Note:** drivers are universal but thermal protector is voltage specific

#### Dimming

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase (standard)

0-10V and Lutron dimming also available

See pages 7-8 for more dimming information

#### Construction

20 ga. galvanized steel frame

18 ga. galvanized steel splice housing and hanger brackets

Die-cast optical housing and trim

Die-cast heat sink

#### Finish

Powder coat paint/wet paint

Consult factory for custom finishes

#### Certifications

CSA damp as tested to UL 1598 standards

IC/AT rated (optional)

Damp location

Wet location option

#### 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 Remodeler version)

### Ceiling Types

Gyp Board	Acoustical Tile	Tech Zone	Mill Work	
5/8" - 2"	3/4" - 2"	6"	* 3/4"	* 1 1/2"

\* Trimmed only

26" Hanger Bars included. Consult factory for hanger bars greater than 26"

### Electrical Data

	16w		23w	
	System Watts	Amps	System Watts	Amps
120v	16	0.13	23	0.19
277v	16	0.06	23	0.08

Electronic constant current LED driver

Includes thermal protector, 2w power consumption

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## PROJECT:

## TYPE:

### Ordering Information

Frame: \_\_\_\_\_ - **LED** - \_\_\_\_\_

Trim: \_\_\_\_\_

1 2 3 4 5 6

7 8 9 10 11

### Frame

- 1** Model  
**HDL-HP-R-A16**  
**HDL-HP-R-A16-TL** (Trimless)  
**HDL-HP-R-REM-A16** (Remodeler)  
**HDL-HP-R-REM-A16-TL** (Remodeler Trimless)
- 2** Wattage  
**16**  
**23**
- 3** Source  
**LED**
- 4** Voltage  
**120**  
**277**
- 5** Driver  
**LE/TE** - TRIAC/ELV dimming (standard)  
**HILUME** - Lutron Hi-lume® A Series dimming driver  
**0-10V** - 0-10v dimming; 1% dim  
**DALI** - DALI 1% dimming driver
- 6** Options/Accessories  
**CP** - Chicago Plenum (not for use with Remodeler version)  
**EM** - emergency battery pack (see additional details)  
**IC/AT** - insulated ceiling/air tight (16w only, and not for use with Remodeler version)

### Trim

- 7** Model  
**HDL-HP-RLD-A16**  
**HDL-HP-RLD-A16-TL** (Trimless)
- 8** Aperture Finish
- | <u>Trim</u>                             | <u>Trimless</u>           |
|---|---------------------------|
| <b>MBW</b> - matte black, white trim    | <b>MB</b> - matte black   |
| <b>MWW</b> - matte white, white trim    | <b>MW</b> - matte white   |
| <b>SLVW</b> - matte silver, white trim  | <b>SLV</b> - matte silver |
| <b>MBB</b> - matte black, black trim    |                           |
| <b>SLVS</b> - matte silver, silver trim |                           |

- 9** Beam Spreads  
**30SOL** - 30° beam with solite lens  
**50SOL** - 50° beam with solite lens  
**65SOL** - 65° beam with solite lens  
**75SAT** - 75° beam with satin ice lens
- 10** Color Temp  
**83 CRI** **90+ CRI**  
**27** - 2700-83 **229** - 2200-90+  
**30** - 3000-83 **279** - 2700-90+  
**35** - 3500-83 **309** - 3000-90+  
**40** - 4000-83 **CRISP** - CrispWhite
- 11** Options/Accessories (see additional details below)  
**WET** - wet location (*not for trimless version*)

#### Additional details:

#### Options/Accessories:

**EM** - emergency battery pack with remote test switch (not for use with CP or IC/AT options; or for Remodeler versions)

# Hornet® HP

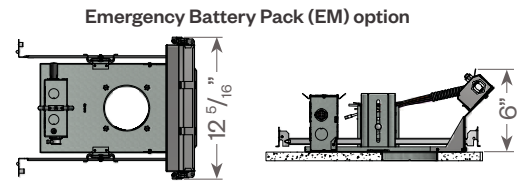
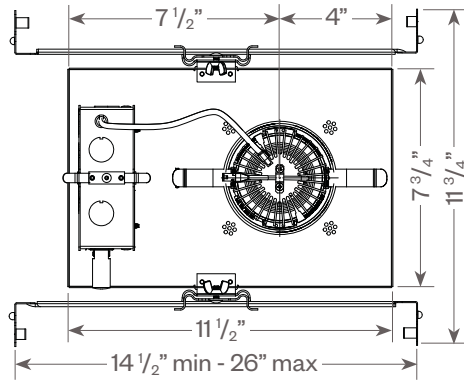
Round Lensed Downlight



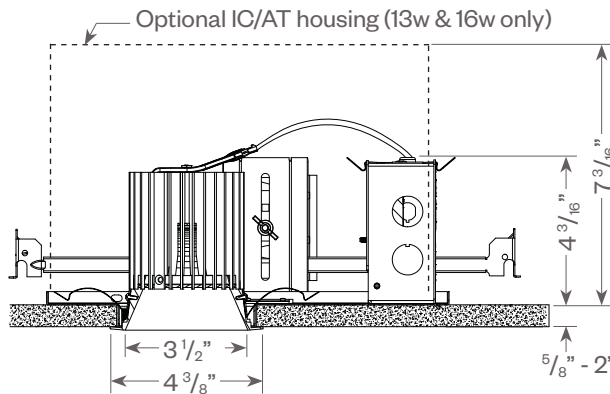
## PROJECT:

## TYPE:

### Hornet HP Downlight: Round Lensed

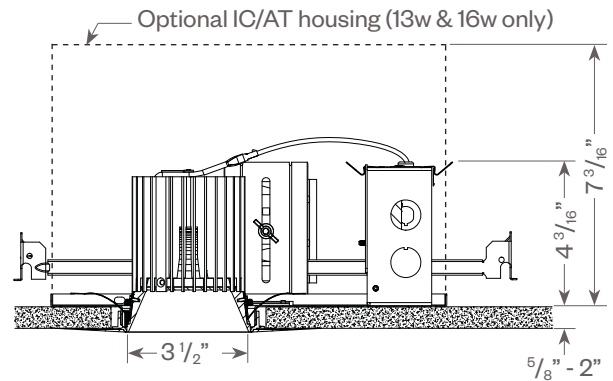


#### Trimmed



Ceiling cut out: 4" dia.

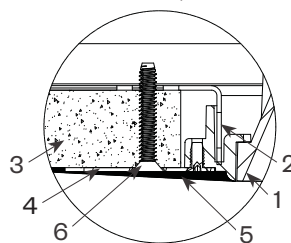
#### Trimless



Ceiling cut out: 4 1/2" dia.

### Plaster Frame Installation Detail (for trimless fixture only)

1. Reflector Trim
2. Aperture plate
3. Ceiling 5/8"
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



# Hornet® HP

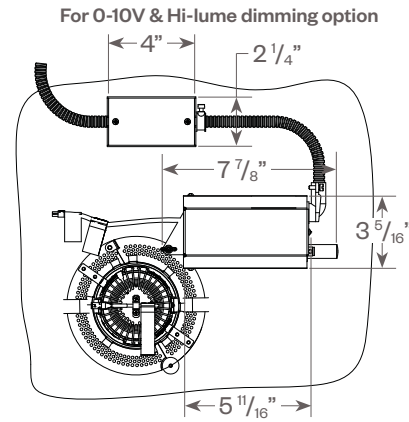
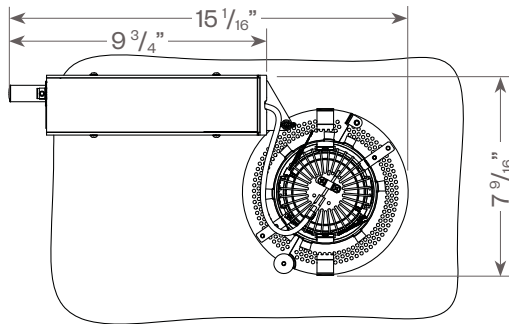
Round Lensed Downlight



## PROJECT:

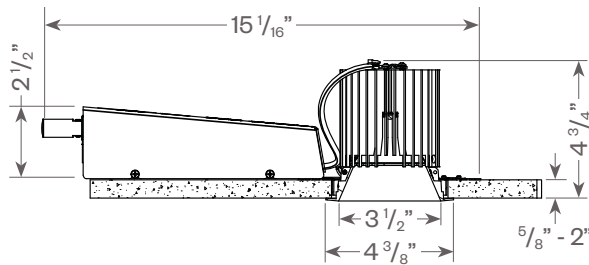
## TYPE:

### Hornet HP Downlight: Round Lensed Remodeler

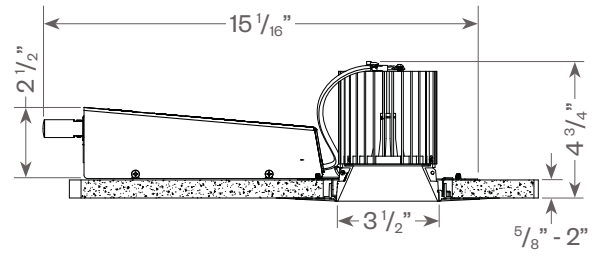


## Trimmed

## Trimless



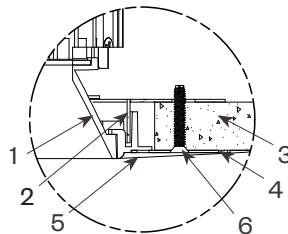
Ceiling cut out: 4" dia.



Ceiling cut out: 4 1/2" dia.

### Plaster Frame Installation Detail (for trimless fixture only)

1. Reflector Trim
2. Aperture plate
3. Ceiling 5/8"
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



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## PROJECT:

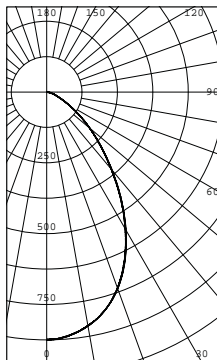
## TYPE:

**Fixture Data:** For 16w data, multiply by 0.75 (Complete photometric data (IES format) available upon request.)

### 23W LED, 3000K

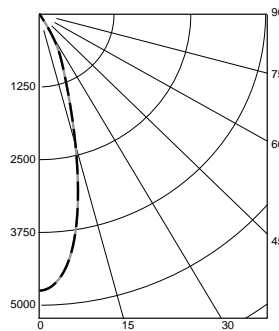
CCT Conversion: Multiply by 0.96 for 2700K-83, 1.02 for 3500K-83, 1.04 for 4000K-83, 0.71 for 2200K-90, 0.80 for 2700K-90, 0.83 for 3000K-90, 0.65 for CRISP

**75° Satin Ice Lens**  
LTL #631077  
Lumens: 1,310



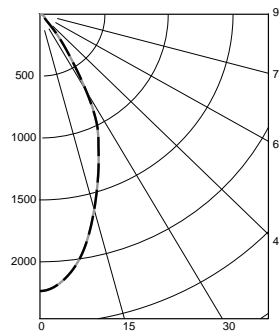
Candelas at Nadir	
Deg	Candela
0	875
5	866
15	797
25	653
35	455
45	271

**30° Solite Lens**  
LTL #1191156  
Lumens: 1,645



Candelas at Nadir	
Deg	Candela
0	4748
5	4478
15	2354
25	877
35	126
45	42

**50° Soite Lens**  
LTL #1191155  
Lumens: 1,513



Candelas at Nadir	
Deg	Candela
0	2236
5	2150
15	1624
25	1063
35	367
45	67

## Application Data:

### Notes and Definitions:

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

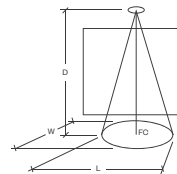
**D**=Distance to floor or wall.

**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.



75° Satin Ice Lens	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
	5.0'	36	5.1	5.1
	7.5'	16	7.7	7.7
	10.0'	9	10.3	10.3
	12.5'	6	13.5	13.5

30° Solite Lens	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
	5.0'	190	2.7	2.7
	7.5'	85	3.7	3.7
	10.0'	48	5.1	5.1
	12.5'	31	6.3	6.3

50° Solite Lens	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
	5.0'	90	3.7	3.7
	7.5'	40	5.5	5.5
	10.0'	23	7.3	7.3
	12.5'	15	9.1	9.1

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### 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.

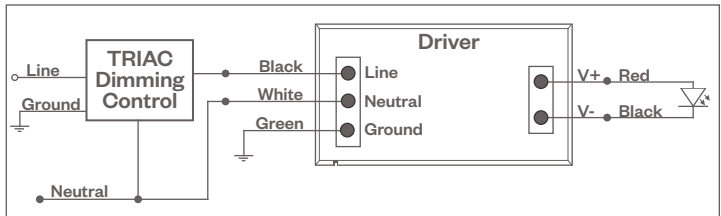
#### TRIAC (Forward Phase) DIMMING (Standard)

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)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	

##### Central System

ETC "SR" Rack w/D20 Module	Lutron Grafik Eye QS
Lutron "GP" Panel	
ETC "DRD" Rack w/D20 Module	

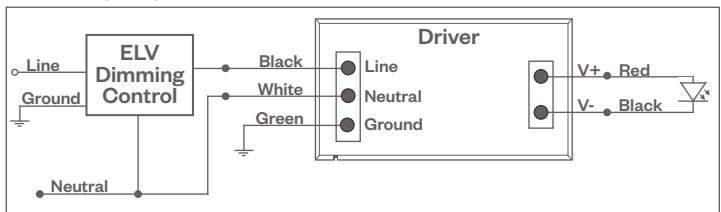
#### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers. Best for New Construction applications

##### 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)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	
Leviton "Surslide"	Leviton "Vizio"

##### Central System

ETC "SR" Rack w/ELV10 Module	Lutron Grafik Eye QS with
Lutron "GP" Panel with PHPM-PA	PHPM-PA Interface
Interface	
ETC "DRD" Rack w/ELV10 Module	

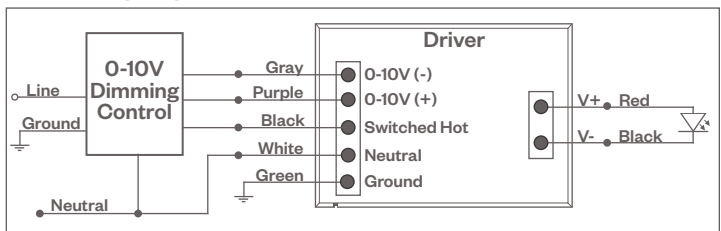
#### 0-10V - DIMMING (-0-10V Option)

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

Lutron "Diva" - DDTV with PP-120H Interface	Leviton Renoir II 0-10v
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##### Central System

Lutron Grafik Eye with GRX-TVI Interface
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## PROJECT:

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### 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.

### LUTRON A-SERIES HI-LUME / ECOSYSTEM (-DIM-HILUME Option)

Integrates into Lutron EcoSystem building management

#### Notes:

- 120V or 277V
- Dims down to less than 5% light output
- May use 3-Wire or EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

#### Compatible Dimmers

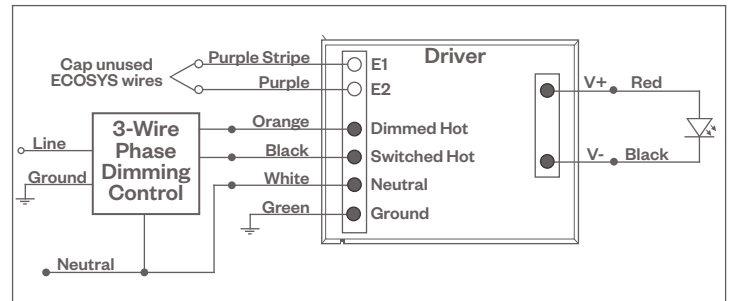
##### Wall Box (3-Wire Fluorescent)

DIVA  
Maestro  
Nova T  
Vareo

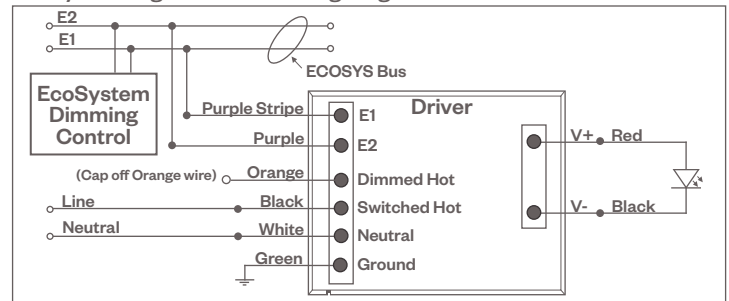
##### Central System

Lutron EcoSystem compatible controls  
ETC "SR" Rack w/D20F Module  
ETC "DRD" Rack w/D20F Module

#### 3-Wire Wiring Diagram



#### 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

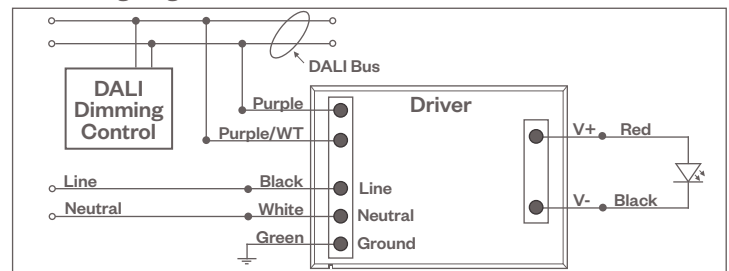
##### Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

##### Central System

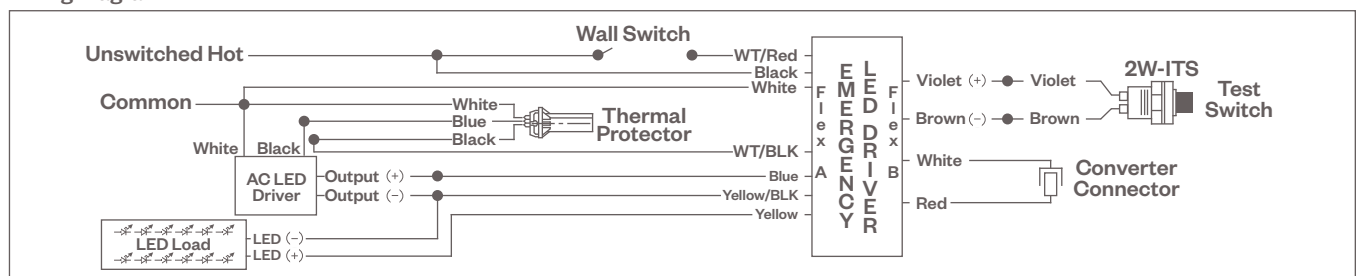
Dynalite  
Fifth Light

#### DALI Wiring Diagram



### EMERGENCY DIMMING (-EM OPTION)

#### Wiring Diagram





# QuickShip Hornet® HP

Round Lensed Downlight



**PROJECT:**

**TYPE:**

Amerlux® QuickShip makes it possible not only to keep up with expectations, but to keep ahead of them. We help enhance your competitive edge, ensuring you can start installation more quickly than you thought possible.

We can ship within 5-10 business days of your Amerlux QuickShip order, depending upon the selection.

- **QuickShip must be clearly marked on all P.O.'s.**
- **Must note on P.O. if requesting frames ship first.**
- **Standard shipping terms apply.**
- **See terms & conditions below.**

**Please see following page for ordering information.**

**Quantity:** 100 pieces or less

Frames: 5 days

Trims: 10 days

## Terms & Conditions

1. For QuickShip processing, please submit QuickShip items on separate purchase order and indicate "QuickShip" on order.
2. Configurations outside of what is displayed on the QuickShip program are not available under the QuickShip lead times.
3. Please contact Customer Support to process orders with quantities larger than those listed.
4. Orders will be entered within 24 hours of receipt of a clean purchase order. Lead times are calculated by business days from time of sales order confirmation. Orders will ship within QuickShip lead times or sooner.
5. Change orders and order cancellations cannot be processed after sales order confirmation is generated.
6. For freight allowed (greater than \$3,000), order will ship complete based on longest lead time item. Please indicate on PO if Partial Shipments are approved and indicate freight method. For partial shipments under \$3,000, customer will be invoiced for freight.
7. All Lead times indicate when the fixture ships from Amerlux®. Arrival at destination is contingent upon carrier.

**Expedite your orders by providing:**

- **Separate purchase order noting "QuickShip Program"**
- **Complete and accurate configurations**
- **Accurate pricing, quote number, shipping and contact information**

***Amerlux reserves the right to modify this program at any time.***



# QuickShip Hornet® HP

Round Lensed Downlight



PROJECT:

TYPE:

## QuickShip Ordering Information

Frame: HDL-HP-R-A16 - -LED - - - -  
1 2 3 4 5 6  
Trim: HDL-HP-RLD-A16 - - -  
7 8 9 10

### Frame

- 1** Model  
HDL-HP-R-A16
- 2** Wattage  
16  
23
- 3** Source  
LED
- 4** Voltage  
120  
277
- 5** Driver  
LE/TE - TRIAC/ELV dimming  
0-10V - 0-10v dimming; 1% dim
- 6** Options/Accessories  
CP - Chicago Plenum

### Trim

- 7** Model  
HDL-HP-RLD-A16
- 8** Aperture Finish  
MWW - matte white, white flange
- 9** Beam Spreads  
50SOL - 50° beam with solite lens  
75SAT - 75° beam with satin ice lens
- 10** Color Temp  
83 CRI  
30 - 3000-83  
35 - 3500-83

