

# HORNET® HP DOWNLIGHT

3.5" SQUARE ADJUSTABLE TRIMLESS LED

## APPLICATIONS:

Retail and commercial accent & display lighting

## CONSTRUCTION:

20 ga. galvanized steel frame  
18 ga. galvanized steel splice housing and hanger brackets  
Cast aluminum plaster frame w/perforated face  
Die-cast optical housing  
Extruded aluminum and die-cast heat sink

## ELECTRICAL:

Electronic constant current LED driver, 120v or 277v input  
ELV and Triac dimming standard, 120v or 277v.  
0-10v and Lutron systems available. See following pages for more information.

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 by warranty.

## MOUNTING:

For use in sheet rock ceilings, typical ceiling thickness 5/8"

## OPTICS:

LED:

Color Temp Options: 2200K, 2700K, 3000K, 3500K, 4000K  
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)  
97 typ. (2200K, 2700K, 3000K)



Optional Amerlux Crisp White technology available  
R9 Value: 11 (83CRI), 92 (97CRI)

Binning: 3 MacAdam (SDMC)  
Lumen Maintenance: >70% of initial lumens @ 50,000 hrs  
Lumen Output (at 3000K):

18w: SP 1170 typ	20w: SP 1300 typ
NF 1115 typ	NF 1239 typ
FL 1044 typ	FL 1160 typ
WF 1040 typ	WF 1156 typ

0-30° lockable tilt, 358° rotation

## LABELING:

 pending approval to UL standards as tested by  CSA.

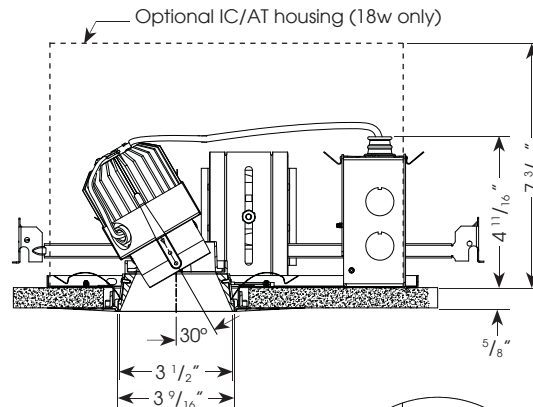
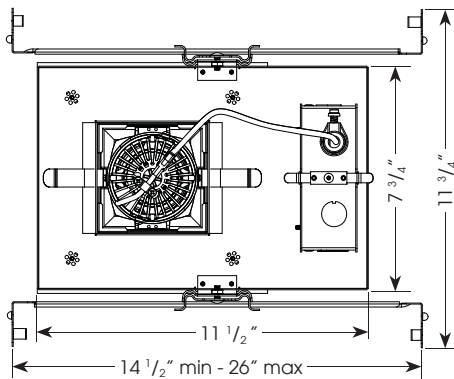
For indoor use only  
IC/AT rated (optional)  
Damp location

HDL-HP-SA-A14-TL  
LED



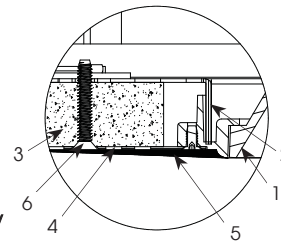
PROJECT:

TYPE:



Ceiling Cut Out Dimension: 4 1/2" sq.

1. Reflector Trim
2. Fixture Housing 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



## ELECTRICAL

Electronic driver

	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

## ORDERING INFORMATION:

Housing: Model	Wattage	Lamp Type	Voltage	Options	Trim: Model	Aperture Finish	Beam Spread	Color Temp
HDL-HP-S-A14-TL	13	LED	120	HILUME - Lutron Hi-lume® dimming 0-10V - 0-10v dimming CP - Chicago Plenum EM - emergency battery pack with remote test switch (not for use with CP or IC/AT options) IC/AT - insulated ceiling/air tight (18w only)	HDL-HP-SA-A14-TL	MB - matte black MW - matte white SLV - matte silver	SP - spot, 15° NF - narrow flood, 20° MFL - medium flood, 24° FL - flood, 28° WF - wide flood, 45° LS - linear spread, 60° x 10°	83 CRI 2700 3000 3500 4000  97 CRI 2200-97 2700-97 3000-97

**5** year limited  
warranty  
AMERLUX LED  
(see website for details)

Complete Example: HDL-HP-S-A14-TL-20-LED-120/HDL-HP-SA-A14-TL-MB-FL-3000

Housing Example: HDL-HP-S-A14-TL-20-LED-120

Reflector Example: HDL-HP-SA-A14-TL-MB-FL-3000

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.

# HORNET® HP DOWNLIGHT

3.5" SQUARE ADJUSTABLE TRIMLESS LED

HDL-HP-SA-A14-TL  
LED



TYPE:

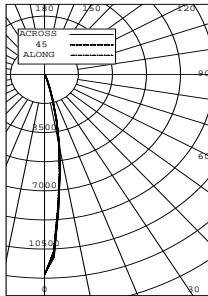


**FIXTURE DATA:** For 13w data, multiply by 0.71; For 18w data, multiply by 0.90

Complete photometric data (ies format) available upon request.

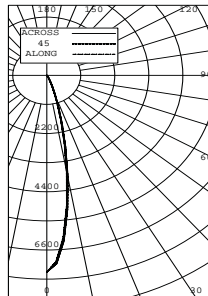
## 20W LED

SPOT  
DISTRIBUTION  
LTL # 818193



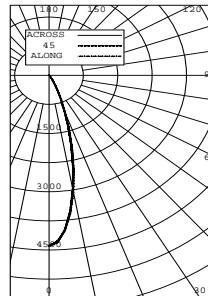
Candelas at Nadir	
Deg	Candela
0	12031
5	7996
15	1673
25	203
35	40
45	3

NARROW FLOOD  
DISTRIBUTION  
LTL # 818194



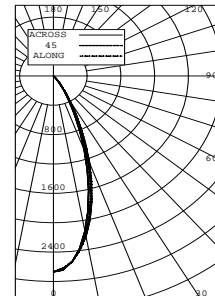
Candelas at Nadir	
Deg	Candela
0	7431
5	6154
15	1767
25	279
35	53
45	5

FLOOD  
DISTRIBUTION  
LTL # 818196



Candelas at Nadir	
Deg	Candela
0	4396
5	3992
15	1958
25	503
35	86
45	6

WIDE FLOOD  
DISTRIBUTION  
LTL # 818238

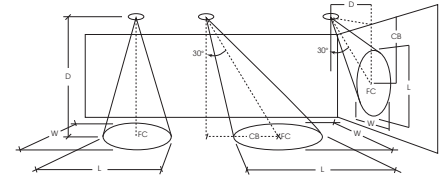


Candelas at Nadir	
Deg	Candela
0	2669
5	2537
15	1759
25	763
35	177
45	9

## 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
SPOT	5.0'	281	1.9	1.9
	7.5'	156	2.6	2.6
	10.0'	98	3.2	3.2
	12.5'	66	3.7	3.7
NARROW FLOOD	5.0'	215	2.2	2.2
	7.5'	112	3.0	3.0
	10.0'	67	3.7	3.8
	12.5'	44	4.6	4.7
FLOOD	5.0'	151	2.6	2.6
	7.5'	73	3.6	3.5
	10.0'	43	4.8	4.7
	12.5'	28	5.9	5.8
WIDE FLOOD	5.0'	95	3.3	3.3
	7.5'	45	4.9	4.6
	10.0'	26	6.4	6.0
	12.5'	17	7.9	7.4

# HORNET® HP DOWNLIGHT

3.5" SQUARE ADJUSTABLE TRIMLESS LED

HDL-HP-SA-A14-TL  
LED



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.

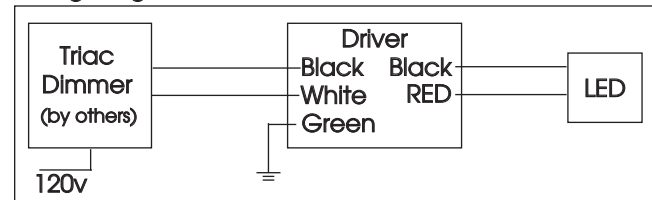
### TRIAC (Forward Phase) DIMMING (standard)

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

#### 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	ETC "DRD" Rack w/D20 Module
Lutron "GP" Panel	Lutron Grafix Eye QS

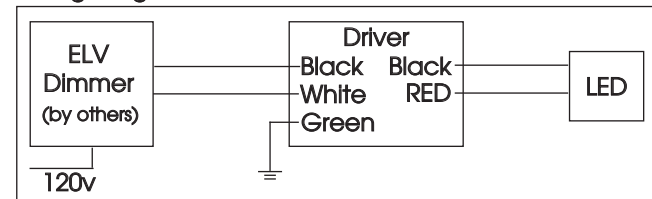
### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

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

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

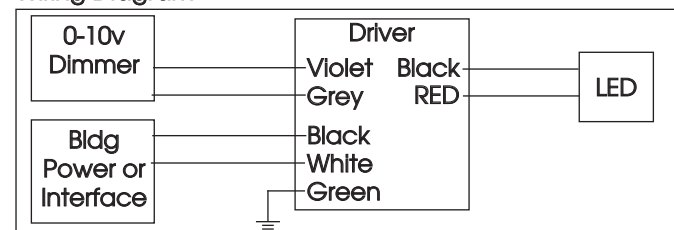
### 0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

#### Notes:

- 120v - 277v
- Dims down to less than 10% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

#### Wiring Diagram



#### Compatible Dimmers

##### Wall Box

Lutron "Diva" - DVTV with PP-120H Interface	Leviton Renoir II 0-10v
---	-------------------------

##### Central System

Lutron Grafix Eye with GRX-TVI Interface
--

# HORNET® HP DOWNLIGHT

3.5" SQUARE ADJUSTABLE TRIMLESS LED

HDL-HP-SA-A14-TL  
LED



TYPE:



## LUTRON HI-LUME / ECO-SYSTEM (-HILUME Option)

Integrates into a variety of building management and daylighting controls

### 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

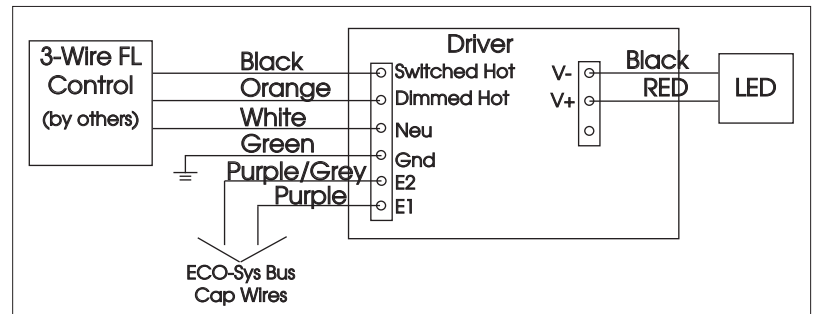
#### Wall Box (3-Wire Fluorescent)

DIVA  
Maestro  
Nova T  
Vareo

#### Central System

Lutron ECO-System compatible controls  
ETC "SR" Rack w/D20F Module  
ETC "DRD" Rack w/D20F Module

### 3-Wire Wiring Diagram



### ECO System Digital Control Wiring

