

# HORNET® HP DOWNLIGHT

## 3.5" ROUND SURFACE CANOPY LED

### APPLICATIONS:

Retail and commercial accent and display lighting

### CONSTRUCTION:

20 ga. galvanized steel frame  
18 ga. galvanized steel splice housing and hanger brackets  
Die-cast optical housing and trim  
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.**

### OPTICS:

0-180° tilt, 360° rotation

### LED:

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

Optional Amerlux CrispWhite technology (18w max)

R9 Value: 11 (83CRI), 55 (90+CRI)

Binning: 3 MacAdam (SDMC)

Lumen Maintenance: >70% of initial lumens @ 50,000 hrs

Lumen Output (18W, 3000K): SP 1369 lm (75 lm/W)

CBCP (18W, 3000K): SP 12,215

### MOUNTING:

For use in T-grid or sheet rock ceilings, 5/8" - 2" standard

### LABELING:



For indoor use only  
IC/AT rated

HDL-HP-RSC-A14  
LED

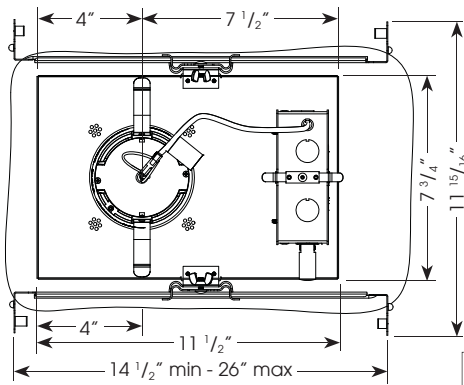


PROJECT:

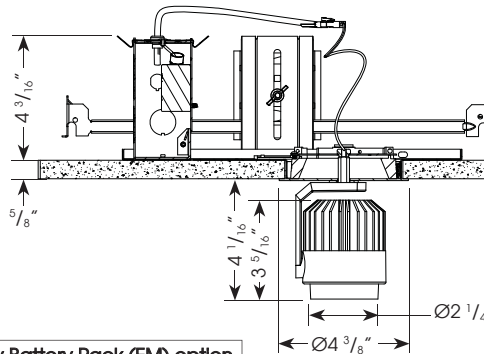
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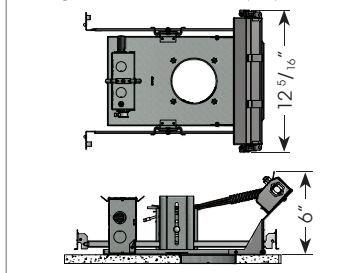
Electrostatic sensitive device,  
observe precautions for  
handling



Celling Cut Out Dimension: 4" dia.



### Emergency Battery Pack (EM) option



### 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/Frame:					Trim:		Beam Spread	Color Temp (CCT-CRI)	Options/Accessories
Model	Wattage	Lamp Type	Voltage	Options	Model	Finish			
HDL-HP-R-A14	13	LED	120	HILUME - Lutron Hi-lume® dimming	HDL-HP-RSC-A14	BT - black texture	SP - spot, 15°	27 - 2700K-83	SNAH - snoot accessory holder, 1" length, matte black interior, specify exterior color (WT, BT, ST), accepts cross blade plus 2 additional forms of media
	18		277	0-10V - 0-10v dimming		WT - white texture	NF - narrow flood, 20°	30 - 3000K-83	
	20			CP - Chicago Plenum EM - emergency battery pack with remote test switch (not for use with CP or IC/AT options)		ST - silver texture	MFL - medium flood, 24°	35 - 3500K-83	
				IC/AT - insulated ceiling/air tight (13W & 18W only)			FL - flood, 28°	40 - 4000K-83	AH - accessory holder, specify finish (WT, BT, ST), accepts 2 forms of media CB - cross blade, matte black finish, requires snoot HEX - hexcell louver (1/8" x 1/8"), requires SNAH or AH SOL - solite beam softening lens, requires SNAH or AH
							WF - wide flood, 45°	229 - 2200K-90+	
							VWF - very wide flood, 60°	279 - 2700K-90+	
							LS - linear spread, 60° x 10°	309 - 3000K-90+	
								CRISP - Crisp White (18W max)	

Complete Example: HDL-HP-R-A14-20-LED-120/HDL-HP-RSC-A14-WT-FL-30

Housing/Frame Example: HDL-HP-R-A14-20-LED-120

Reflector Example: HDL-HP-RSC-A14-WT-FL-30

Cat #:

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

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3.5" ROUND SURFACE CANOPY LED

HDL-HP-RSC-A14  
LED



TYPE:



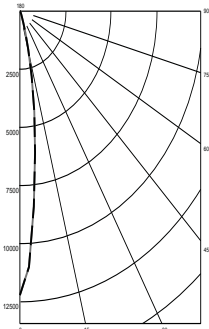
**FIXTURE DATA:** For 13w data, multiply by 0.71; For 20w data, multiply by 1.11

Complete photometric data (ies format) available upon request.

CCT Conversion Factor: 2700K-83 = 0.96; 3500K-83 = 1.02; 4000K-83 = 1.04; 2200K-90+ = 0.71; 2700-90+ = 0.80; 3000K-90+ = 0.83; CRISP = 0.65

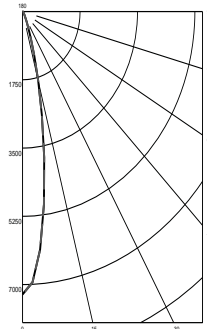
## 18W LED 3000K-83

SPOT (SP)  
DISTRIBUTION  
LTL #855377



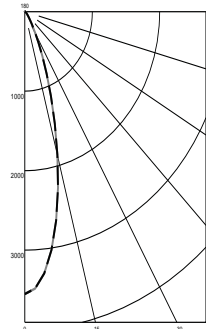
Candelas at Nadir	
Deg	Candela
0	12215
5	8436
15	1705
25	204
35	77
45	26

NARROW FLOOD (NF)  
DISTRIBUTION  
LTL #860527



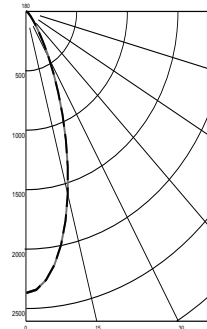
Candelas at Nadir	
Deg	Candela
0	7252
5	6128
15	1841
25	309
35	93
45	41

FLOOD (FL)  
DISTRIBUTION  
LTL # 860528



Candelas at Nadir	
Deg	Candela
0	3551
5	3304
15	1861
25	612
35	156
45	57

WIDE FLOOD (WF)  
DISTRIBUTION  
LTL # 860529

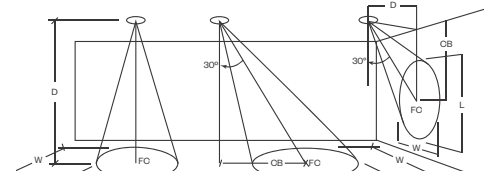


Candelas at Nadir	
Deg	Candela
0	2369
5	2268
15	1592
25	754
35	251
45	82

## 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



30° Aiming Angle  
Horizontal  
Footcandles



30° Aiming Angle  
Vertical  
Footcandles



60° Aiming Angle  
Vertical  
Footcandles

	0° Aiming Angle Horizontal Footcandles				30° Aiming Angle Horizontal Footcandles					30° Aiming Angle Vertical Footcandles					60° Aiming Angle Vertical Footcandles				
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
SPOT	5.0'	484	1.4	1.4	5.0'	313	1.8	1.5	3.0	3.0'	178	3.0	1.6	5.0	3.0'	630	1.6	1.1	2.0
	7.5'	216	2.0	2.0	7.5'	136	2.8	2.4	4.0	4.0'	105	3.8	2.1	6.0	4.0'	450	1.6	1.3	2.0
	10.0'	122	2.7	2.7	10.0'	76	3.7	3.2	6.0	5.0'	67	4.8	2.7	8.0	5.0'	298	2.0	1.6	3.0
	12.5'	78	3.4	3.4	12.5'	46	4.8	4.2	7.0	6.0'	47	5.9	3.2	9.0	6.0'	200	2.4	1.9	3.0
NARROW FLOOD	5.0'	289	1.7	1.7	5.0'	187	2.4	2.1	3.0	3.0'	127	3.3	1.8	4.0	3.0'	422	1.9	1.3	2.0
	7.5'	129	2.8	2.8	7.5'	86	3.5	3.1	4.0	4.0'	70	4.4	2.7	6.0	4.0'	298	1.9	1.5	2.0
	10.0'	73	3.6	3.6	10.0'	47	4.7	4.1	5.0	5.0'	47	5.3	3.2	7.0	5.0'	181	2.5	2.1	3.0
	12.5'	47	4.5	4.5	12.5'	31	5.8	5.2	7.0	6.0'	32	6.7	3.9	8.0	6.0'	133	2.8	2.5	3.0
FLOOD	5.0'	142	2.7	2.7	5.0'	92	3.4	3.1	3.0	3.0'	75	3.8	2.7	4.0	3.0'	232	2.3	1.7	2.0
	7.5'	63	3.9	3.9	7.5'	43	4.9	4.4	4.0	4.0'	44	4.9	3.3	5.0	4.0'	154	2.7	2.4	2.0
	10.0'	36	5.2	5.2	10.0'	25	6.4	5.8	5.0	5.0'	29	6.1	4.1	6.0	5.0'	95	3.4	3.0	2.0
	12.5'	23	6.5	6.5	12.5'	16	8.0	7.2	6.0	6.0'	20	7.4	5.1	7.0	6.0'	69	3.8	3.5	3.0
WIDE FLOOD	5.0'	95	3.2	3.2	5.0'	67	3.9	3.4	2.0	3.0'	63	3.7	2.8	3.0	3.0'	180	2.4	2.0	1.0
	7.5'	42	4.8	4.8	7.5'	30	5.7	5.3	3.0	4.0'	36	4.9	3.7	4.0	4.0'	105	3.2	2.9	2.0
	10.0'	24	6.4	6.4	10.0'	17	7.6	7.1	4.0	5.0'	23	6.1	4.8	5.0	5.0'	69	3.8	3.5	2.0
	12.5'	15	8.0	8.0	12.5'	11	9.6	8.9	5.0	6.0'	16	7.5	5.7	6.0	6.0'	47	4.7	4.3	3.0

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HDL-HP-RSC-A14  
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.

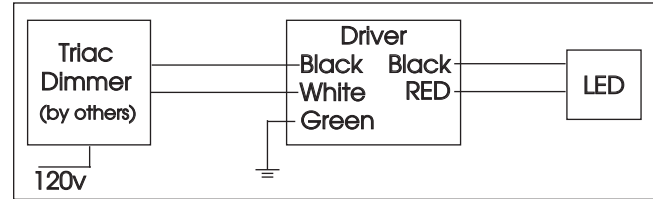
### TRIAC (Forward Phase) DIMMING (standard)

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

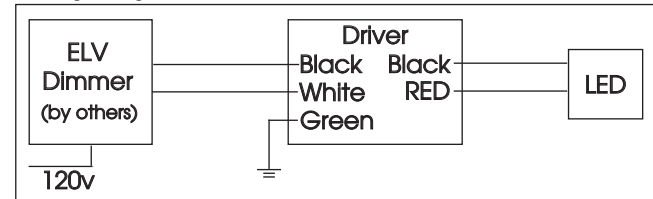
### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

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

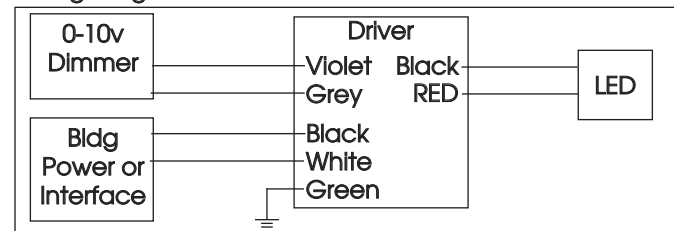
### 0-10V - DIMMING (-0-10V Option)

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
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##### Central System

Lutron Grafix Eye with GRX-TVI Interface
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HDL-HP-RSC-A14  
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 1% light output
- May use 3-Wire or Ecosystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

### Compatible Dimmers

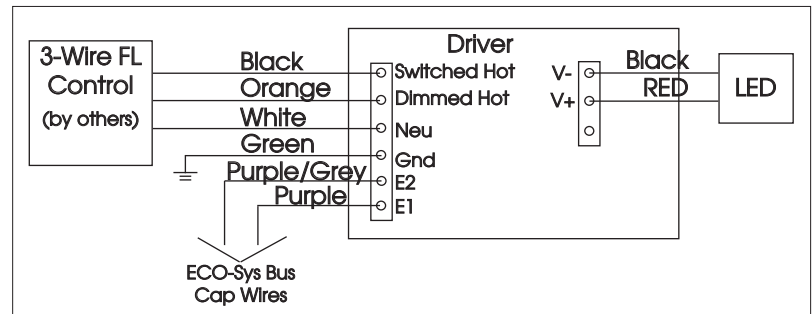
#### Wall Box (3-Wire Fluorescent)

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

