

HORNET® HP DOWNLIGHT

3.5" ROUND DOWNLIGHT TRIMLESS LED

APPLICATIONS:

Retail and commercial ambient lighting

CONSTRUCTION:

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets
Cast aluminum plaster frame with 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)
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 (at 3000K):

18W: SP 1191 typ.	20W: SP 1323 typ.
NF 1112 typ.	NF 1236 typ.
FL 1067 typ.	FL 1185 typ.
WF 1011 typ.	WF 1123 typ.

LABELING:

 approved to UL standards as tested by CSA.
For indoor use only
IC/AT rated (optional)
Damp location

HDL-HP-RD-A14-TL
LED



PROJECT:

TYPE:

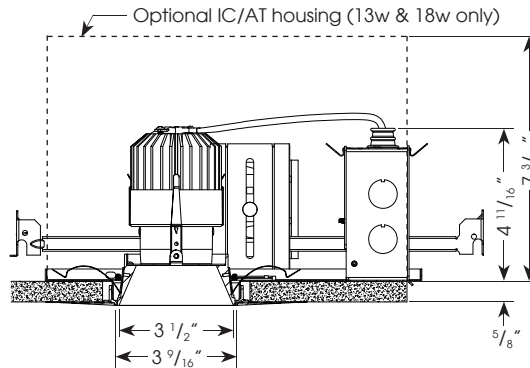
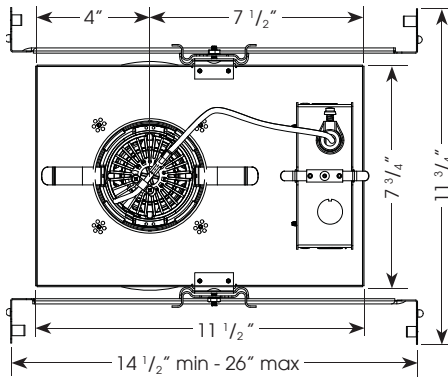


Electrostatic sensitive device,
observe precautions for
handling

Title 24
Compliant

5 year limited
warranty
AMERLUX LED

(see website for details)



Note: See 4th pg for Emergency Battery Pack (EM) dimensions

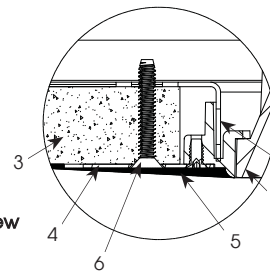
Ceiling Cut Out Dimension: 4 1/2" dia.

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

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



ORDERING INFORMATION:

Housing: Model	Wattage	Lamp Type	Voltage	Options	Trim: Model	Aperture Finish	Beam Spread	Color Temp (CCT-CRI)	Options/Accessories
HDL-HP-R-A14-TL	13* 18* 20	LED	120 277	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 (13w & 18w only)	HDL-HP-RD-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° VWF* - very wide flood, 60° LS - linear spread, 60° x 10°	27 - 2700K-83 30 - 3000K-83 35 - 3500K-83 40 - 4000K-83 229 - 2200K-90+ 279* - 2700K-90+ 309* - 3000K-90+	HEX - hexcell louver SOL - solite beam softening lens

Complete Example: HDL-HP-R-A14-TL-20-LED-120/HDL-HP-RD-A14-TL-MB-FL-30

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

Reflector Example: HDL-HP-RD-A14-TL-MB-FL-30

Cat #:

* Title 24 Compliant

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

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LED



TYPE:

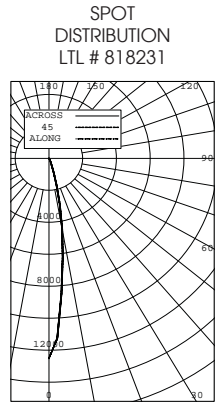


FIXTURE DATA: For 13W data, multiply by 0.71; For 18W data, multiply by 0.90

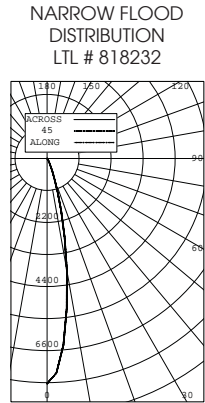
Complete photometric data (ies format) available upon request.

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

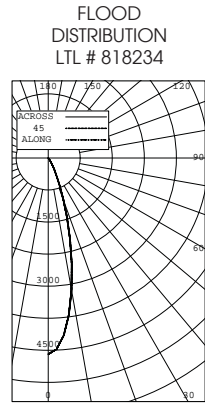
20W LED 3000K-83



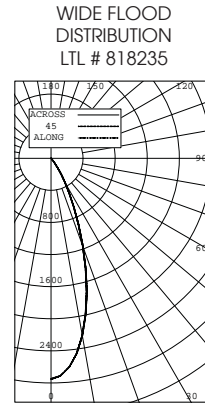
Candelas at Nadir	
Deg	Candela
0	12508
5	8495
15	1754
25	190
35	32
45	3



Candelas at Nadir	
Deg	Candela
0	7734
5	6428
15	1866
25	277
35	45
45	4



Candelas at Nadir	
Deg	Candela
0	4591
5	4168
15	1966
25	470
35	72
45	4

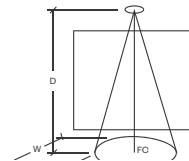


Candelas at Nadir	
Deg	Candela
0	2751
5	2614
15	1719
25	676
35	141
45	7

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'	483	1.4	1.4
	7.5'	223	1.9	1.9
	10.0'	124	2.7	2.7
	12.5'	80	3.3	3.3
NARROW FLOOD	5.0'	231	2.1	2.1
	7.5'	120	2.9	2.9
	10.0'	71	3.7	3.7
	12.5'	47	4.6	4.6
FLOOD	5.0'	150	2.7	2.7
	7.5'	74	3.6	3.6
	10.0'	43	4.8	4.8
	12.5'	28	5.8	5.8
WIDE FLOOD	5.0'	97	3.2	3.2
	7.5'	46	4.6	4.6
	10.0'	27	6.1	6.1
	12.5'	17	7.5	7.5

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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.

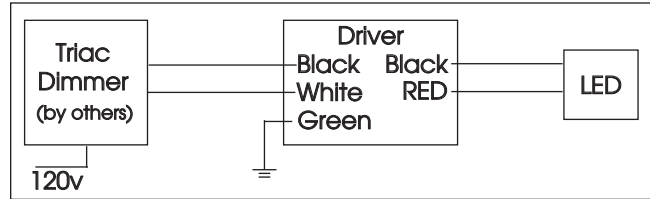
TRIAC (Forward Phase) DIMMING (standard)

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 "Nova-T"
Lutron "Maestro"

Lutron "Vareo"
Lutron "Skylark"

Central System

ETC "SR" Rack w/D20 Module
Lutron "GP" Panel

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

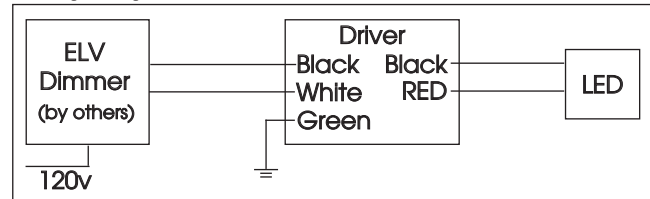
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

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 "Nova-T"
Lutron "Maestro"
Leviton "Surslide"

Lutron "Vareo"
Lutron "Skylark"
Leviton "Vizio"

Central System

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

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

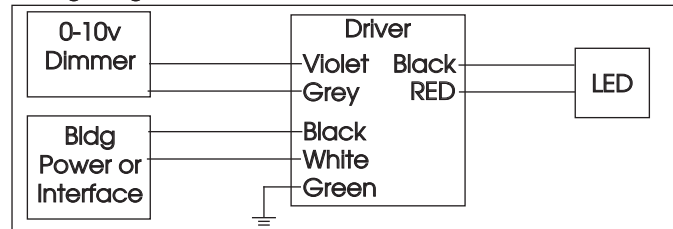
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v - 277v
- Dims down to 1% 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

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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

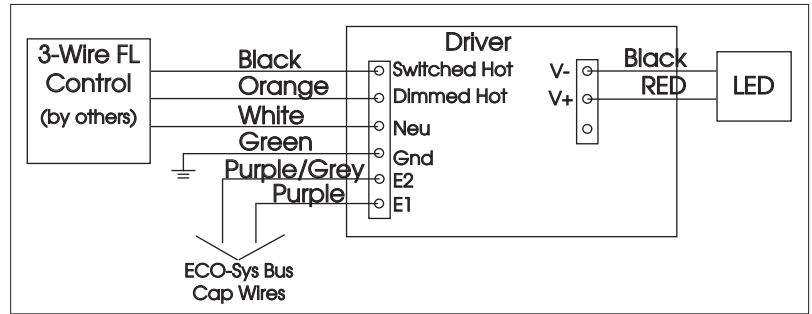
Wall Box (3-Wire Fluorescent)

- DIVA
- Maestro
- Nova T
- Vareo

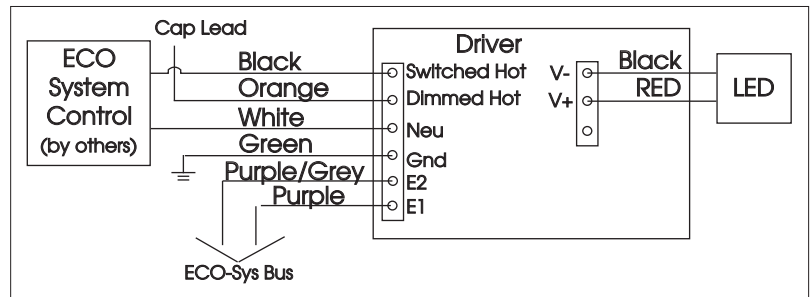
Central System

- 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



Emergency Battery Pack (EM) option

