

HORNET® HP DOWNLIGHT

3.5" ROUND 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 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, 0° tilt):

18W: SP 1199 typ 20W: SP 1332 typ

NF 1114 typ NF 1238 typ

FL 1074 typ FL 1193 typ

WF 1024 typ WF 1138 typ

0-30° lockable tilt, 358° rotation

LABELING:



approved to UL standards as tested by CSA.

For indoor use only

IC/AT rated (optional)

Damp location

HDL-HP-RA-A14-TL
LED

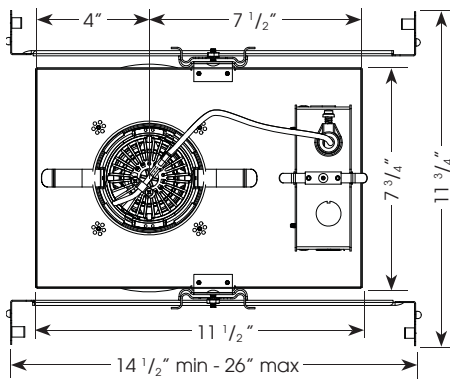


PROJECT:

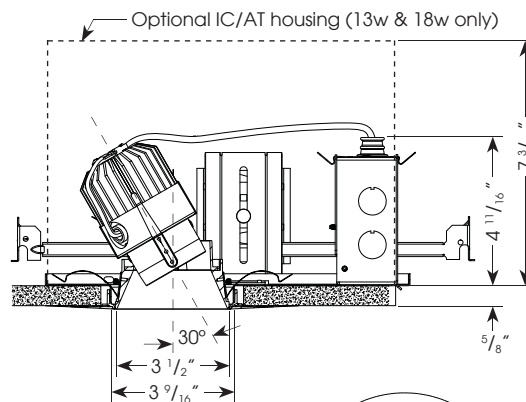
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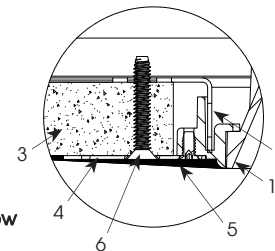
Electrostatic sensitive device,
observe precautions for
handling



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



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



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 (CCT-CRI)	Options
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-RA-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-RA-A14-TL-MB-FL-30

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

Reflector Example: HDL-HP-RA-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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3.5" ROUND ADJUSTABLE TRIMLESS LED

HDL-HP-RA-A14-TL
LED



TYPE:



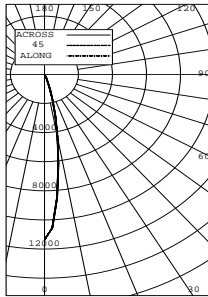
FIXTURE DATA: For 13W data, multiply by 0.71; For 18W data, multiply by 0.90

Complete photometric data (ies format) available upon request.

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

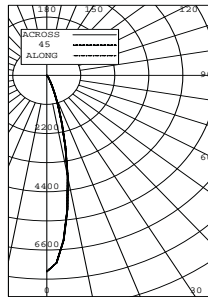
20W LED 3000K-83

SPOT
DISTRIBUTION
LTL # 818224



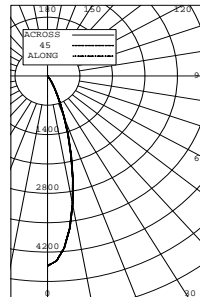
Candelas at Nadir	
Deg	Candela
0	11367
5	8488
15	1846
25	199
35	38
45	3

NARROW FLOOD
DISTRIBUTION
LTL # 818225



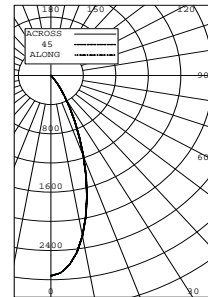
Candelas at Nadir	
Deg	Candela
0	7412
5	6254
15	1895
25	288
35	49
45	4

FLOOD
DISTRIBUTION
LTL # 818227



Candelas at Nadir	
Deg	Candela
0	4527
5	4117
15	1963
25	488
35	77
45	5

WIDE FLOOD
DISTRIBUTION
LTL # 818228

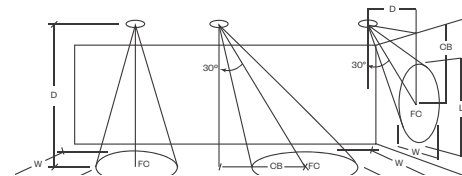


Candelas at Nadir	
Deg	Candela
0	2747
5	2609
15	1715
25	693
35	149
45	8

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'	286	1.9	1.9
	7.5'	157	2.7	2.7
	10.0'	97	3.3	3.3
	12.5'	65	3.9	3.9
NARROW FLOOD	5.0'	215	2.2	2.2
	7.5'	112	3.0	3.0
	10.0'	67	3.8	3.8
	12.5'	44	4.7	4.7
FLOOD	5.0'	148	2.7	2.7
	7.5'	73	3.7	3.7
	10.0'	43	4.8	4.8
	12.5'	28	5.9	5.9
WIDE FLOOD	5.0'	97	3.2	3.2
	7.5'	46	4.6	4.6
	10.0'	26	6.1	6.1
	12.5'	17	7.6	7.6

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HDL-HP-RA-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.

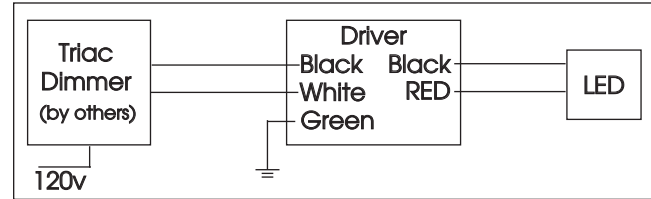
TRIAC (Forward Phase) DIMMING (standard)

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

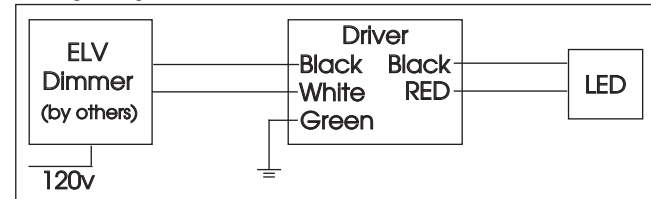
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

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

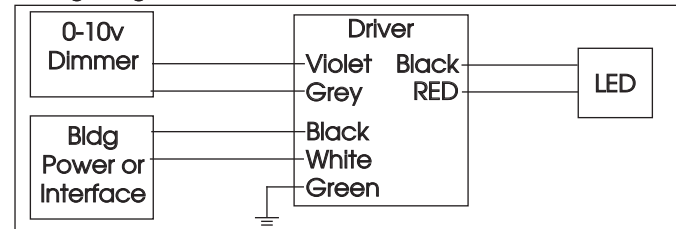
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v - 277v
- Dims down to 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
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Central System

Lutron Grafix Eye with GRX-TVI Interface	
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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

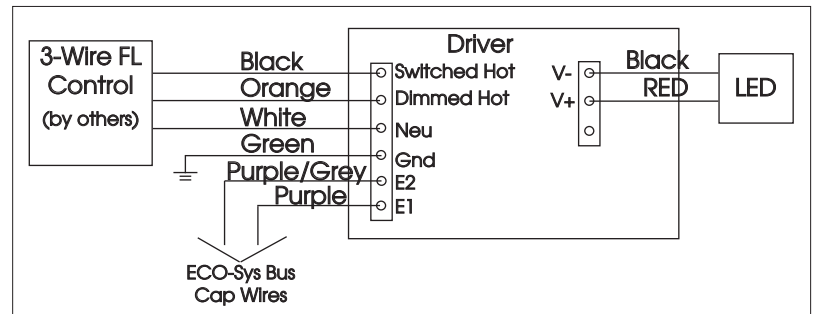
Wall Box (3-Wire Fluorescent)

DIVA
Maestro
Nova T
Vareo

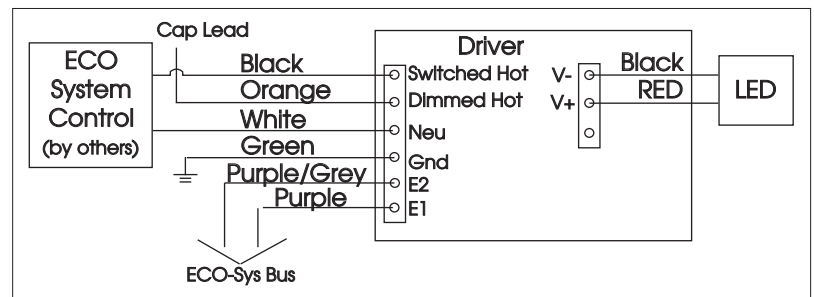
Central System

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



Emergency Battery Pack (EM) option

