

HORNET® HP DOWNLIGHT

3.5" ROUND LENSED 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
Thermally protected
Die-cast trim, extruded aluminum heat sink

OPTICS:

High reflectance, highly diffuse mixing chamber
Engineered nano technology lens provides high transmission while concealing LED image

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
R9 Value: 11 (83CRI), 55 (90+CRI)
Binning: 3 MacAdam (SDMC)
Lumen Maintenance: >70% of initial lumens @ 50,000 hrs
Lumen Output (at 3000K):
Very Wide Flood (75°): 16W - 911 lm, 23W - 1310 lm

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 $\frac{5}{8}$ "

LABELING:



approved to UL standards as tested by CSA.

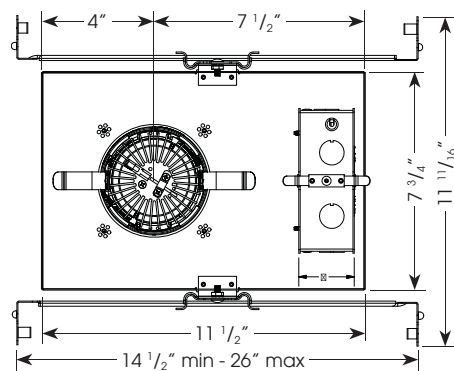
For indoor use only
IC/AT rated (optional)
Damp location

HDL-HP-RLD-A14-TL
LED

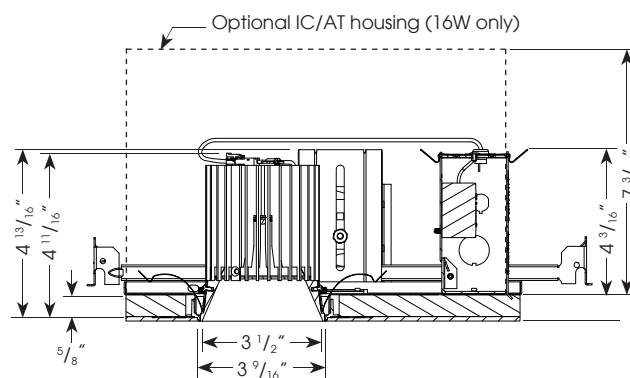


PROJECT:

TYPE:

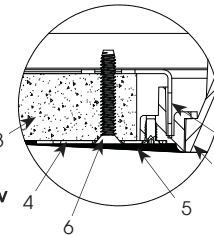


Note: See 4th pg for Emergency Battery Pack (EM) dimensions



Ceiling Cut Out Dimension: $4 \frac{1}{2}$ " dia.

1. Reflector Trim
2. Fixture Housing Aperture Plate
3. Ceiling $\frac{5}{8}$ "
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



Electrostatic sensitive device, observe precautions for handling

ELECTRICAL

	16W		23W	
	System Watts	Amps	System Watts	Amps
120V	16	0.13	23	0.19
277V	16	0.06	23	0.08

ORDERING INFORMATION:

Housing: Model	Wattage	Lamp Type	Voltage	Options
HDL-HP-R-A14-TL	16 23	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 (16W only)

Trim: Model	Aperture Finish	Color Temp (CCT-CRI)
HDL-HP-RLD-A14-TL	MB - matte black	27 - 2700K-83 30 - 3000K-83
	MW - matte white	35 - 3500K-83 40 - 4000K-83
	SLV - matte silver	229 - 2200K-90+ 279 - 2700K-90+ 309 - 3000K-90+

Complete Example: HDL-HP-R-A14-TL-23-LED-120/HDL-HP-RLD-A14-TL-MW-30

Housing Example: HDL-HP-R-A14-TL-23-LED-120

Reflector Example: HDL-HP-RLD-A14-TL-MW-30

Cat #:

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

HORNET® HP DOWNLIGHT

3.5" ROUND LENSED DOWNLIGHT TRIMLESS LED

HDL-HP-RLD-A14-TL
LED

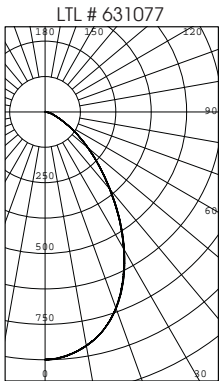


TYPE:



FIXTURE DATA: For 16w data, multiply by 0.70 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

23W LED 3000K-83

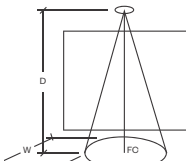


Candelas at Nadir

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

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
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

HORNET® HP DOWNLIGHT

3.5" ROUND LENSED DOWNLIGHT TRIMLESS LED

HDL-HP-RLD-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.

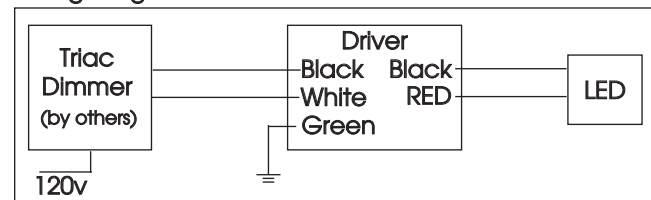
TRIAC (Forward Phase) DIMMING (standard)

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 "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

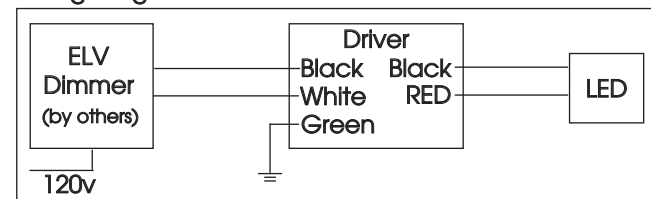
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

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

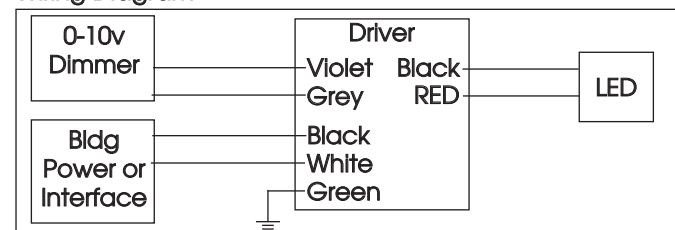
0-10V - DIMMING (-0-10V Option)

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

HORNET® HP DOWNLIGHT

3.5" ROUND LENSED DOWNLIGHT TRIMLESS LED

HDL-HP-RLD-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 1% light output
- May use 3-Wire or Ecosystem Control
- Consult Dimming manufacturer for installation Instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers

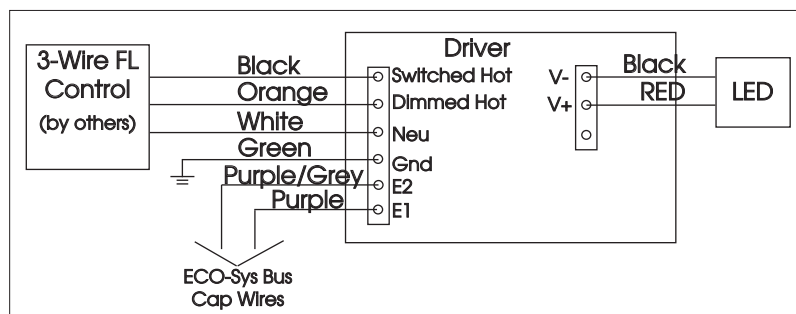
Wall Box (3-Wire Fluorescent)

DIVA
Maestro
Nova T
Vareo

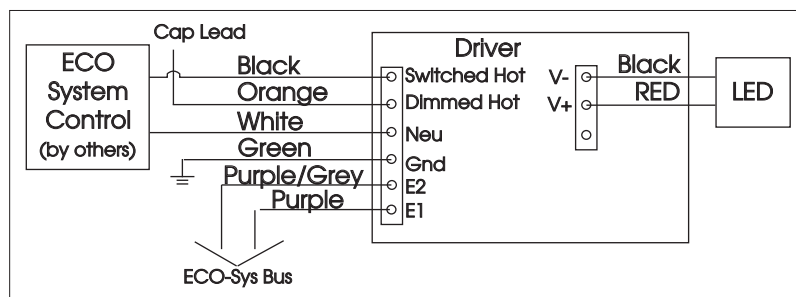
Central System

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

