

Hornet® HP

3.5" Round Surface Canopy



Features

The Hornet® HP Downlight Round Surface Canopy is a high performing alternative for designers, utilizing the Hornet® HP Downlight frame. The LED module sits on the canopy plate with a single arm yoke, allowing for aiming flexibility. Small and compact, this fixture delivers the power of the 20W CMH, but surpasses it with enhanced control, instant on, dimmability and long lifespan. The Hornet® HP's quality, energy efficient light source provides better maintained and more secure lumens, and consistent color rendering.

Product Overview

- Type: Round Surface Accent & Display
- Wattage: 13, 18, 20, 22
- Lumen Output: 1,785 max; 80.4 lm/W (spot optic)
- CBCP: 14,280 max (spot optic)
- Color Temp: 2200K, 2700K, 3000K, 3500K, 4000K, CRISP
- CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K)
CrispWhite (18W max) & 3K Class A available
- Dimming: TRIAC & ELV (120/277VAC) - 5% Dim
Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black, 120/277VAC
0-10V dimming, 1% Dim
DALI (120/277VAC) - 1% Dim

PROJECT:

TYPE:

Fixture Summary *(see following pages for more information)*

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
13	1030	79.2	8,243	3000K-83
18	1451	89.6	11,610	3000K-83
20	1640	86.3	13,119	3000K-83
22	1785	80.4	14,280	3000K-83

*Data is based on Spot optic
See pg 6 for other beam spreads*

Electrical Data

	13W		18W		20W		22W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	13	0.11	16.2	0.14	19	0.16	22.2	0.19
277V	13	0.05	16.2	0.06	19	0.07	22.2	0.08

Electronic constant current LED driver



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PROJECT:

TYPE:

Housing/Frame Ordering Information

		T			
1	2	3	4	5	6
1 <u>Model</u> For New Construction HDL-HP-R-NC-A17[†] (New Construction) HDL-HP-R-CP-A17[†] (Chicago Plenum (COEA) housing) HDL-HP-R-IC-A17[†] (Insulated Ceiling/air tight, 13W & 18W only) For Existing Ceilings HDL-HP-R-REM-A17[†] (Remodeler)	2 <u>Style</u> T - trimmed	3 <u>Wattage</u> 13 18 20 (not available for use with IC housing) 22 (not available for use with IC housing)	4 <u>Voltage</u> 120 277 120/277 (for use with IC housing only)	5 <u>Driver</u> (for non-dimming, select LE/TE option) LE/TE - TRIAC/ELV dimming HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/ Fade-to-Black 0-10V - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim	6 <u>Options/Accessories</u> EM - emergency battery pack with remote test switch (not available for use with REM, CP or IC options)

Trim Ordering Information

HDL-HP-RSC-A17		T			
1	2	3	4	5	6
1 <u>Model</u> HDL-HP-RSC-A17[†]	2 <u>Style</u> T - trimmed	3 <u>Finish</u> WT - white texture BT - black texture ST - silver texture <i>Other finishes, consult factory</i>	4 <u>Beam Spreads</u> SP - spot, 15° NF - narrow flood, 20° MFL - medium flood, 24° FL - flood, 28° WF - wide flood, 40° VWF - very wide flood, 60° LS - linear spread, 60° x 10°	5 <u>Color Temp</u> 83 CRI 90+ CRI 27 - 2700K-83 229 [†] - 2200K-90+ CRISP[†] - CrispWhite 30 - 3000K-83 279 - 2700K-90+ 3CLA[†] - 3K Class A 35 - 3500K-83 309 - 3000K-90+ 40 - 4000K-83 359 - 3500K-90+ 409 - 4000K-90+ [†] Not available for 20W or 22W	6 <u>Options/Accessories</u> SNAH - snoot accessory holder, 1" length, matte black in terior, exterior finish matches fixture finish, accepts cross blade plus 2 additional forms of media AH - accessory holder, finish matches fixture finish, accepts 2 forms of media HEX - hexocell louver, 1/8" x 1/8" (requires SNAH or AH) SOL - solite lens (requires SNAH or AH) CB - cross blade, matte black finish (requires SNAH)

[†] The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

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PROJECT:

TYPE:

Specifications

Application

Retail and commercial accent and display lighting

Construction

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets (not for Remodeler version)
Die-cast optical housing
Extruded aluminum and die-cast heat sink

Optical

0-180° tilt, 360° rotation
Beam spreads: Spot, 15°; Narrow Flood, 20°;
Medium Flood, 24°; Flood, 28°; Wide Flood, 40°
Very Wide Flood, 60°; Linear Spread, 60° x 10°

LED

Color Temp Options:
2200K, 2700K, 3000K, 3500K, 4000K
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite* LED available, 18W max
Class A** 3000K (high CRI, high gamut)
R9 Values: 11 (83 CRI), 55 (92 CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs
**CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.*
***Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.*

Electrical

Wattage: 13, 18, 20, 22
Electronic constant current LED driver, 120/277VAC input
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 and over voltage damage is not covered under warranty.

Driver

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron and DALI systems also available
See pages 8-9 for more dimming information

Finish

Powder coat paint
Consult factory for custom finishes

Mounting

For use in T-Grid or GB ceilings; max ceiling thickness 1"
Adjustable hanger bars included, 14 1/2" - 26" std. (except for Remodeler versions)
(32"-48" Adjustable hanger bars available)
Consult Factory for thicker ceilings

Certifications

CSA damp as tested to UL 1598 standards
IC/AT rated *(optional, not for Remodeler version)*

Warranty

5 year limited warranty

Emergency Battery Pack (EM)

Powers fixture at 5.1 watts (approx. 400 Lm) for 90 minutes (not for use with REM, CP or IC/AT versions)

Hornet[®] HP

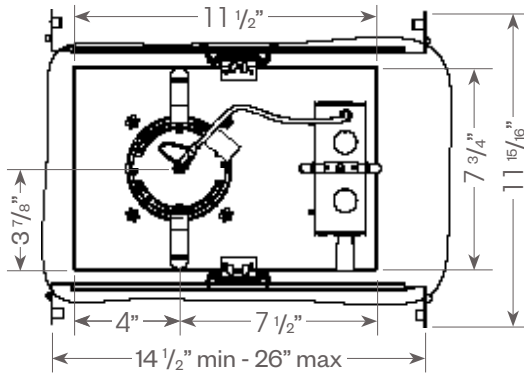
3.5" Round Surface Canopy



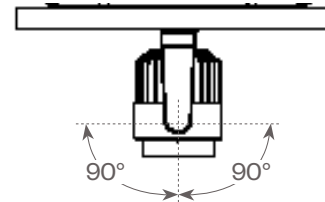
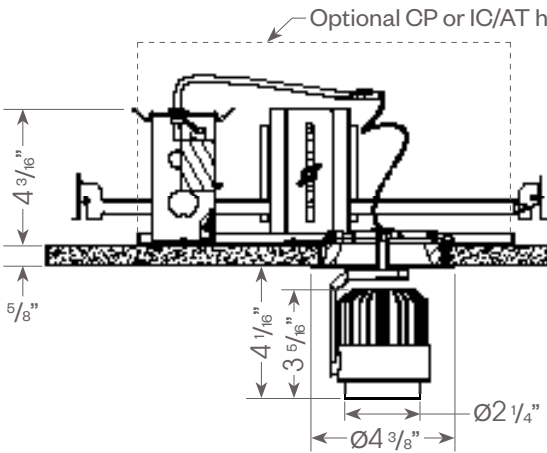
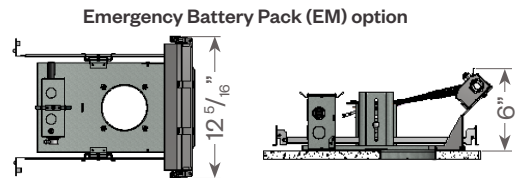
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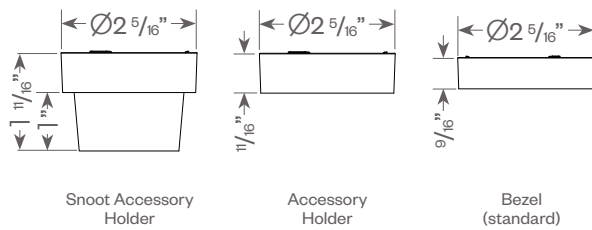
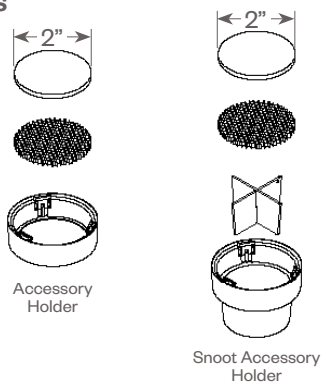
Hornet HP Round Surface Canopy:



Ceiling cut out: 4" dia.



Accessories



Hornet[®] HP

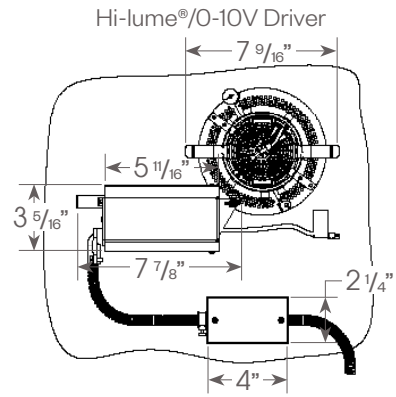
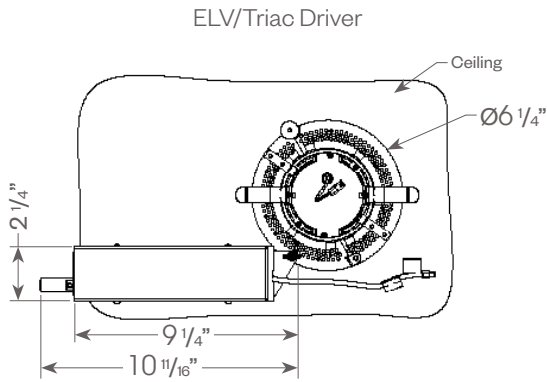
3.5" Round Surface Canopy



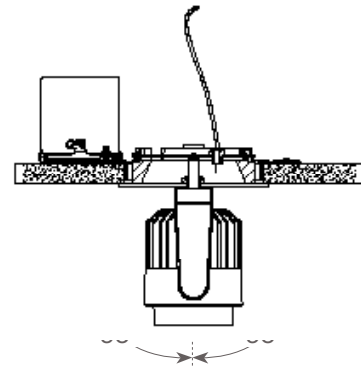
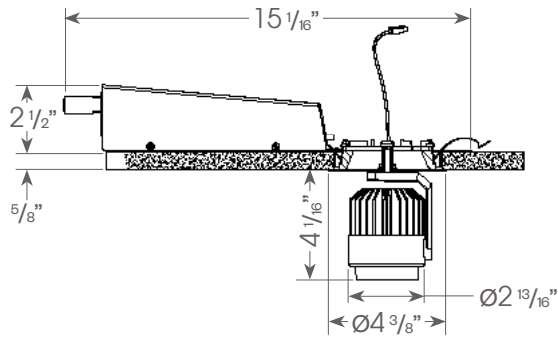
PROJECT:

TYPE:

Hornet HP Round Surface Canopy Remodeler:



Ceiling cut out: 4" dia.



Hornet[®] HP

3.5" Round Surface Canopy



PROJECT:

TYPE:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

Wattage:	13W	18W	20W	22W
Factor:	0.71	1.0	1.13	1.23

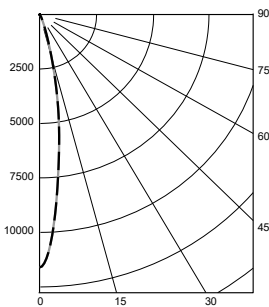
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

CCT:	2200K-90+*	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP*	3CLA*
Factor:	0.71	0.80	0.83	0.87	0.90	0.65	0.75

* Not available for use with 20W or 22W

18W, 3000K-83

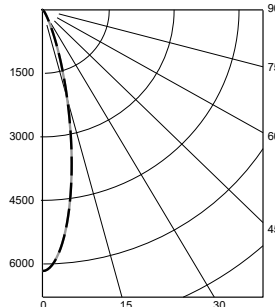
Spot (SP) Distribution, 15°
LTL #14346087.01
Lumens: 1,451



Candelas at Nadir

Deg	Candela
0	11610
5	8378
15	1825
25	257
35	86
45	31

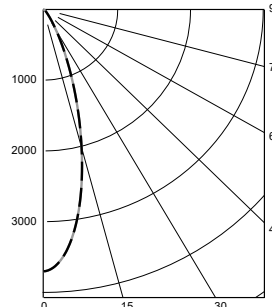
Narrow Flood (NF) Distribution, 22°
LTL #14346087.02
Lumens: 1,390



Candelas at Nadir

Deg	Candela
0	6167
5	5391
15	2012
25	426
35	119
45	52

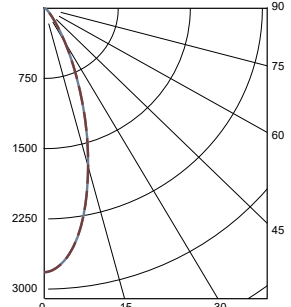
Flood (FL) Distribution, 28°
LTL #14346087.04
Lumens: 1,370



Candelas at Nadir

Deg	Candela
0	3703
5	3440
15	1925
25	651
35	179
45	67

Wide Flood (WF) Distribution, 40°
LTL #14346087.05
Lumens: 1,374



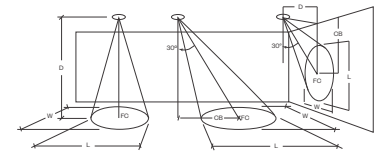
Candelas at Nadir

Deg	Candela
0	2820
5	2674
15	1750
25	763
35	248
45	86

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				
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
Spot	5.0'	463	1.4	1.4	5.0'	213	2.3	2.2	3.0	3.0'	135	3.4	2.2	5.0	3.0'	403	1.8	1.6	2.0
	7.5'	206	2.1	2.1	7.5'	110	3.3	2.9	4.0	4.0'	87	4.2	2.6	6.0	4.0'	295	2.1	1.8	2.0
	10.0'	116	2.9	2.9	10.0'	64	4.3	3.7	5.0	5.0'	58	5.2	3.2	8.0	5.0'	205	2.5	2.2	3.0
	12.5'	74	3.6	3.6	12.5'	44	5.1	4.5	7.0	6.0'	42	6.2	3.6	9.0	6.0'	162	2.8	2.5	3.0
Narrow Flood	5.0'	247	1.9	1.9	5.0'	133	2.9	2.7	3.0	3.0'	97	3.7	2.4	4.0	3.0'	280	2.1	1.8	2.0
	7.5'	110	3.0	3.0	7.5'	67	4.0	3.6	4.0	4.0'	57	4.8	3.1	5.0	4.0'	201	2.4	2.2	2.0
	10.0'	62	3.9	3.9	10.0'	40	5.2	4.6	5.0	5.0'	39	5.7	3.6	7.0	5.0'	131	3.0	2.7	3.0
	12.5'	40	5.0	5.0	12.5'	26	6.4	5.7	6.0	6.0'	28	6.9	4.3	8.0	6.0'	99	3.4	3.0	3.0
Flood	5.0'	168	2.5	2.5	5.0'	86	3.6	3.2	2.0	3.0'	70	3.9	2.9	4.0	3.0'	194	2.4	2.2	2.0
	7.5'	72	3.7	3.7	7.5'	42	5.0	4.6	4.0	4.0'	43	5.1	3.5	5.0	4.0'	138	2.8	2.7	2.0
	10.0'	40	5.0	5.0	10.0'	25	6.5	5.9	5.0	5.0'	28	6.2	4.4	6.0	5.0'	87	3.6	3.2	2.0
	12.5'	25	6.3	6.3	12.5'	16	8.2	7.4	6.0	6.0'	20	7.5	5.2	7.0	6.0'	65	4.0	3.7	3.0
Wide Flood	5.0'	113	3.0	3.0	5.0'	71	3.9	3.5	2.0	3.0'	60	4.1	3.1	3.0	3.0'	156	2.7	2.5	2.0
	7.5'	50	4.5	4.5	7.5'	34	5.5	5.1	3.0	4.0'	36	5.3	3.9	4.0	4.0'	110	3.1	3.0	2.0
	10.0'	28	6.0	6.0	10.0'	19	7.4	6.8	5.0	5.0'	24	6.4	4.8	5.0	5.0'	72	3.9	3.5	2.0
	12.5'	18	7.5	7.5	12.5'	13	9.1	8.4	6.0	6.0'	17	7.7	5.7	7.0	6.0'	52	4.5	4.2	3.0

Hornet[®] HP

3.5" Round Surface Canopy



PROJECT:

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.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

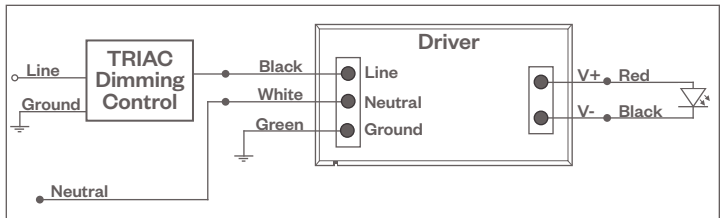
TRIAC (Forward Phase) DIMMING (Standard)

Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

Notes:

- 120VAC or 277VAC*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

TRIAC Wiring Diagram



Compatible Dimmers[†]:

Wall Box (TRIAC 120VAC)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Skylark"	

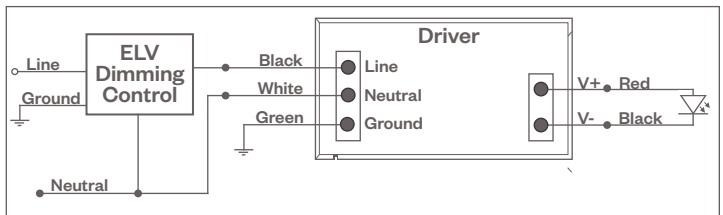
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

- 120VAC or 277VAC*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

ELV Wiring Diagram



Compatible Dimmers[†]:

Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Maestro"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

Hornet[®] HP

3.5" Round Surface Canopy



PROJECT:

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.

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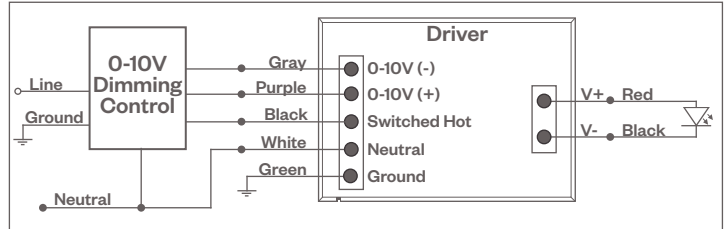
0-10V DIMMING

Integrates into a variety of building management and daylighting controls

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

0-10V Wiring Diagram



Compatible Dimmers*:

Wall Box

Lutron "Diva" - DVSTV | Leviton Renoir II 0-10V

Central System

Lutron Grafik Eye with GRX-TV1 Interface

LUTRON LDE1 DIMMING

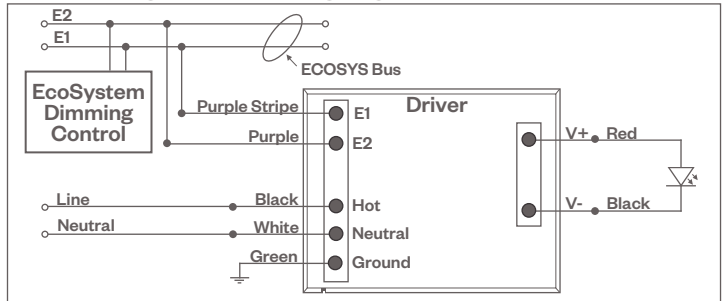
Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Lutron LDE1 (HILUME-H-ECO)

EcoSystem Digital Control Wiring Diagram



Compatible Dimmers*:

Lutron ECO System

Pow Pak Dimming Modules
Energj Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

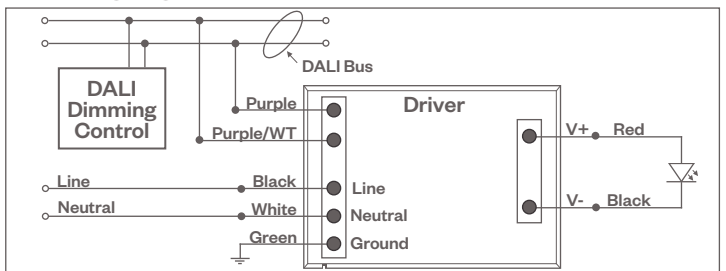
DALI DIMMING

Digital control protocol allows individual fixture control

Notes:

- 120VAC - 277VAC*
- Dims down to 1% light output in most cases

DALI Wiring Diagram



Compatible Dimmers*:

Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

Central System

Dynalite
Fifth Light

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

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3.5" Round Surface Canopy



PROJECT:

TYPE:

EMERGENCY DIMMING

Wiring Diagram

