Hornet® HP Select

Round Lensed Downlight

PROJECT:	TYPE:

Features

The Hornet HP Select round downlight series provides powerful yet comfortable ambient lighting for retail and commercial spaces without compromising on budget or design. It delivers over 2,200 lumens in a 75-degree distribution and features Solite lensing for visually pleasing aesthetics. The Hornet HP Select offers trimmed, trimless, or millwork trim options and can easily integrate into current Hornet downlight platforms, making it perfect for both retrofit and new construction projects.

HSE-R-LD

Product Overview

Type:	Recessed Round Lensed Downlight
Wattage:	10W, 12W, 16W, 21W, 23W
Color Temp:	2700K, 3000K, 3500K, 4000K Signature LED options in 2700K & 3000K
CRI:	83 typ. or 90+ typ.
Dimming:	**Wired:** TRIAC & ELV, Hi-lume®, 0-10V, DALI **Wireless:** Lutron Athena RF node, BubblyNet Bluetooth

Certifications

5 year limited warranty AMERLUX LED

Fixture Summary

Performance Data

Watts	Delivered Lumens	LPW	CBCP	Color Temp-CRI
10	855	95	665	3000K-83
12	1140	95	887	3000K-83
16	1513	94.6	1177	3000K-83
21	1995	95	1552	3000K-83
23	2192	100.2	1706	3000K-83

Data is based on 75SOL optics, 3000K-83 120V IES files available on website.
All wattages and LPW's include 2W for thermal protector.

Electrical Data

	10W		12W		16W		21W		23W	
Voltage	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	9.8	0.08	11.9	0.10	15.2	0.13	21	0.18	22.8	0.19
277V	9.8	0.04	11.9	0.04	15.2	0.06	21	0.008	22.8	0.08

Electronic constant current LED driver.
Includes themal protector, 2W power consumption.

Hornet® HP Select

Round Lensed Downlight

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PROJECT:	TYPE:

Ordering Information - Housing/Frame

_____ . _____ . _____ . _____ . _____ . _____

1 2 3 4 5 6

1	Model
	For New Construction
	HSE-R-NC *(New Construction)*
	HSE-R-CP *(Chicago Plenum (CCEA) housing)*
	HSE-R-IC *(Insulated Ceiling/air tight, 16W max)*
	For Existing Ceilings
	HSE-R-REM *(Remodeler)*

2	Style
	T trimmed
	TL trimless
	MWK[R,T] millwork *(for 1/2" - 11/16" ceiling thickness)*
	[R]Not available for use with Remodeler model
	[T]Consult factory for use in ceilings thicker than 11/16"

3	Wattage
	10
	12
	16
	21
	23 *(not available for use with IC housing)*

4	Voltage
	120
	277
	120/277 *(for use with IC housing only)*

5	Driver *(for non-dimming, select LE/TE option)*
	Wired
	LE/TE TRIAC/ELV dimming
	HILUME-H-ECO - Lutron LDE1 Hi-lume®, 1% dim, Soft-On/Fade-to-Black
	0-10V[T24] 0-10V dimming, 1% dim
	DALI DALI dimming, 1% dim
	Wireless
	AWNR-010* Lutron Athena wireless node, RF only, 0-10V
	BN-BT-010* BubblyNet Bluetooth node, 0-10V
	**** Consult factory for lead time.***

6	Options/Accessories
	EM - emergency battery pack with remote test switch *(not available for use with REM, CP or IC options)*
	HB49 - hanger bars from min 29" to max 49" *(not available for use with REM options)*
	Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.

Ordering Information - Trim

HSE-R-LD _____ . _____ . _____ . _____ . _____

1 2 3 4 5

1	Model
	HSE-R-LD *(lensed downlight)*

2	Style
	T trimmed
	TL trimless
	MWK millwork

3	Finish	
	Trimmed	Trimless/Millwork
	MBW matte black, white flange	**MB** matte black
	MWW matte white, white flange	**MW** matte white
	SLVW matte silver, white flange	**SLV** matte silver
	MBB matte black, black flange	
	SLVS matte silver, silver flange	

4	Beam Spread
	30SOL 30° beam with solite lens
	50SOL 50° beam with solite lens
	75SOL 75° beam with solite lens

5	Color Temp		
	83 CRI	90+ CR	
	27 2700K-83	**279** 2700K-90+	**SA27** Signature Ambiance 2700K-90+
	30 3000K-83	**309** 3000K-90+	**SA30** Signature Ambiance 3000K-90+
	35 3500K-83	**359** 3500K-90+	**SW30** Signature White 3000K-90+
	40 4000K-83	**409** 4000K-90+	**SC30** Signature Color 3000K-90+

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Specifications

Application

Retail and commercial ambient lighting

Construction

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets *(not for Remodeler version)*
Cast aluminum plaster frame with perforated face *(for trimless version only)*
Die-cast optical housing and trim
Die-cast heat sink

Optical

Beam Spread-Lens:
30SOL - 30º beam with solite lens
50SOL - 50º beam with solite lens
75SOL - 75º beam with solite lens
Visually best with SLV reflector finish.

LED

Color Temp Options: 2700K, 3000K, 3500K, 4000K
Signature Ambiance, White, and Color options available *(see below)*
CRI: 83 typ. or 90+ typ.
R9 Values: 11 *(83 CRI)*, 55 *(92 CRI)*
Binning: 3 MacAdam *(SDCM)*
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

Signature Ambiance *(2700K & 3000K): A refined, warm light recipe ideal for hospitality, residential-style commercial spaces, and retail. It accentuates woods, textiles, bronze, and darker finishes, creating a relaxed and inviting luxury environment.*

Signature White *(3000K): A premium white option built for crisp displays, clean architectural finishes, and retail settings. It enhances white surfaces and visual clarity, ensuring whites read brighter without sacrificing refinement.*

Signature Color *(3000K): A vibrant, color-enhancing option designed for spaces where merchandise, fabrics, and finishes need to stand out. It heightens the contrast between colors and whites, delivering deeper, richer presentations for dynamic retail and hospitality experiences.*

Electrical

Wattage: 10W, 12W, 16W, 21W, 23W
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.

Note: *Drivers are universal but thermal protector is voltage specific*

Drivers

LE/TE - Leading Edge *(Triac, Forward Phase)* or Trailing Edge *(ELV, Reverse Phase)*
0-10V, Lutron and DALI systems also available
See pages 6-7 for more dimming information

Finish

Powder coat paint/wet paint
Consult factory for custom finishes

Mounting

26" Hanger bars included (*except for Remodeler versions)*
Optional **HB49** - hanger bars from min 29" to max 49" available
Trimmed Fixture:
For use in grid or sheetrock ceilings, 5/8" - 2" max standard
Trimless Fixture:
For use in sheetrock ceilings, max ceiling thickness 5/8" *(consult factory for thicker ceilings)*
Millwork Fixture:
Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material. Ceiling thickness 1/2"-11/16".
Consult factory for use in ceilings thicker than 11/16".
Not available for use with Remodeler model

Certifications

CSA damp as tested to UL 1598 standards
CP - Chicago Plenum *(CCEA)* option
IC/AT rated *(16W max)*
Damp location

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 versions)*

Optional RF Node

Amerlux® has partnered with control companies to create building environments that are safer, and smarter, than ever before. At the heart of our partnership is intelligent RF nodes, the most advanced digital wireless communication available today. Integrated into Amerlux products.

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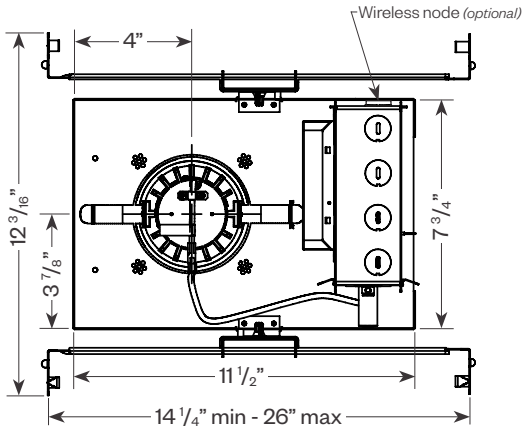
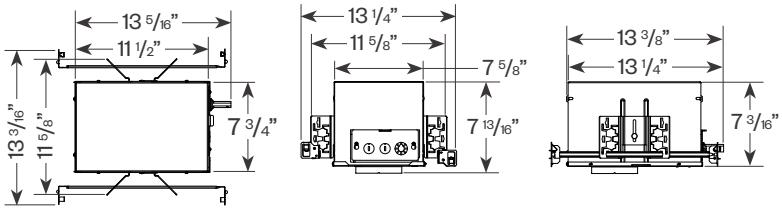
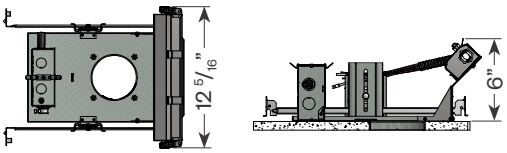
Product Details



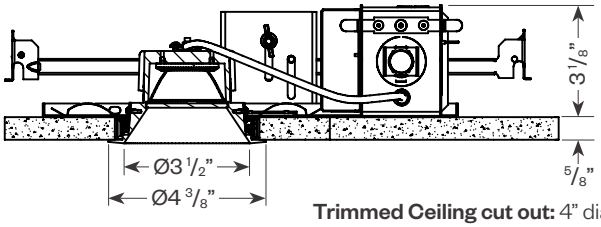
Optional CP or IC/AT housing

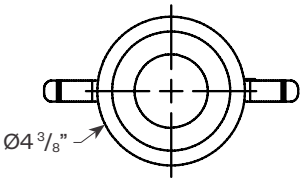


Emergency Battery Pack (EM) option



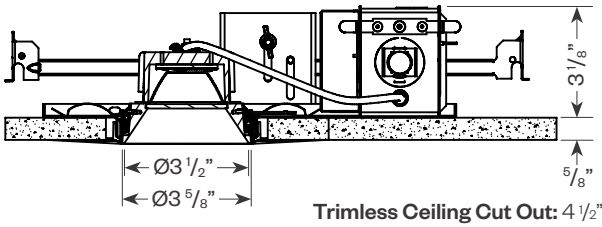
Trimmed

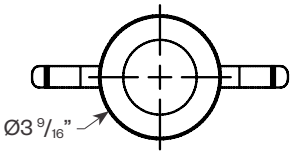




Trimmed Ceiling cut out: 4” dia.

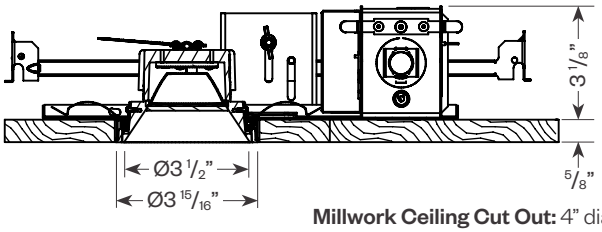
Trimless

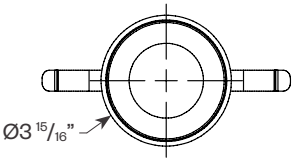




Trimless Ceiling Cut Out: 4 1/2” dia.

Millwork

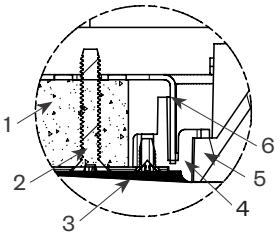




Millwork Ceiling Cut Out: 4” dia.

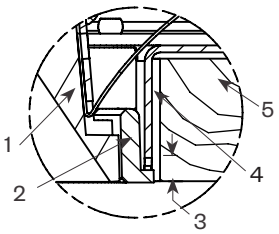
Plaster Frame Installation Detail *(for trimless fixture only)*

1. Ceiling 5⁄8”
2. 6-32 Type F Thread Cutting Screw
3. Plaster Skim Coat *(by others)*
4. Cast Aluminum Plaster Frame
5. Reflector Trim
6. Aperture Plate



Millwork Detail

1. Reflector Trim
2. Millwork Ring
3. 1/16" required for trim to be flush with ceiling
4. Aperture Plate
5. Wood Ceiling



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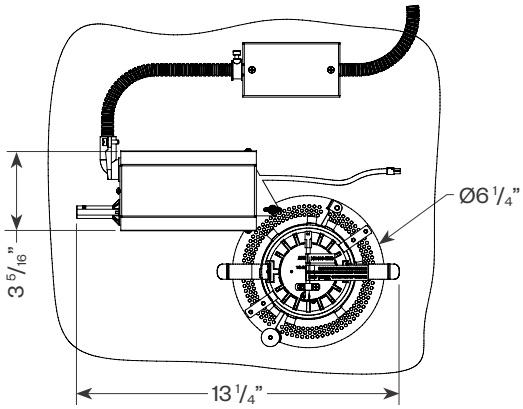
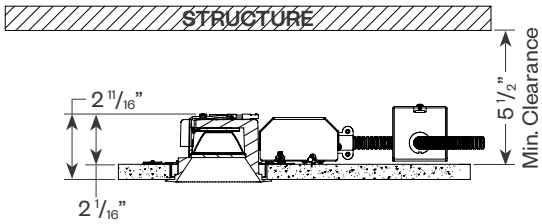
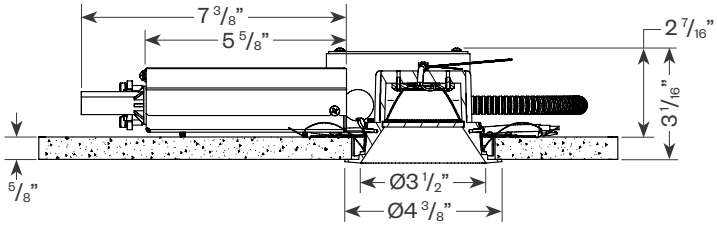
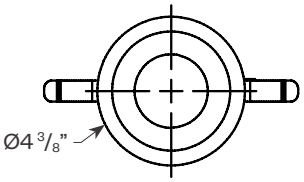
Product Details - Remodeler





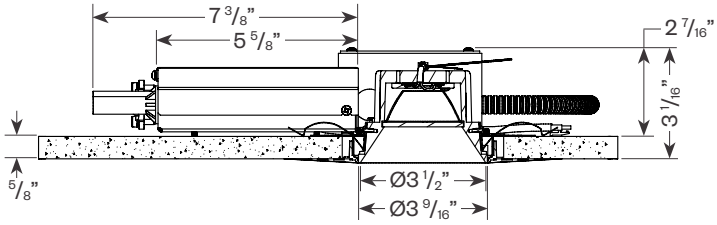
Trimmed

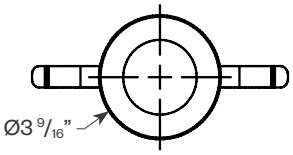




Trimmed Ceiling cut out: 4" dia.

Trimless

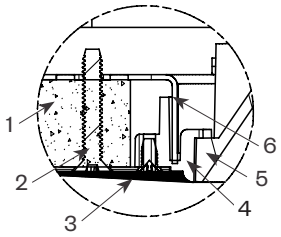




Trimless Ceiling Cut Out: 4 1/2" dia.

Plaster Frame Installation Detail *(for trimless fixture only)*

1. Ceiling 5/8"
2. 6-32 Type F Thread Cutting Screw
3. Plaster Skim Coat *(by others)*
4. Cast Aluminum Plaster Frame
5. Reflector Trim
6. Aperture Plate



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PROJECT:	TYPE:

Performance Data

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

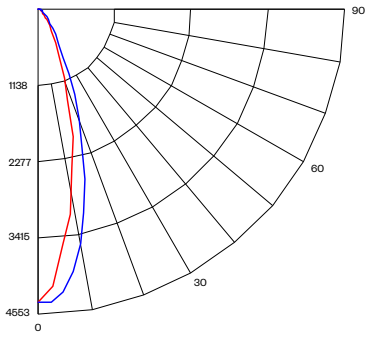
Wattage:	10W	12W	16W	21W	23W
Factor:	0.39	0.52	0.69	0.91	1.0

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+	SA27	SA30	SW30	SC30
Factor:	0.66	0.83	0.86	0.90	0.93	0.98	1.003	1.074	0.99

23W LED, 3000K-83

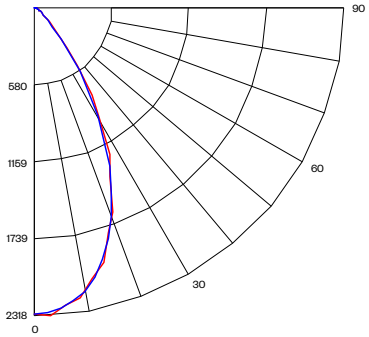
30° Solite Lens
Lumens: 1832 lm; 83.7 lm/W



Candelas at Nadir

Deg	Candela
0	4372
5	4238
15	2642
25	1061
35	352
45	134

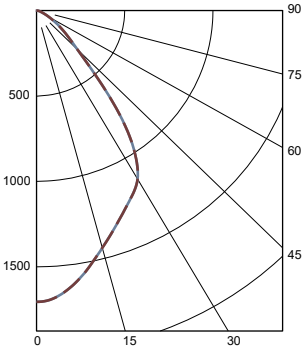
50° Solite Lens
Lumens: 1847 lm; 84.4 lm/W



Candelas at Nadir

Deg	Candela
0	2306
5	2273
15	1962
25	1322
35	590
45	132

75° Solite Lens
LTL # 14845017.02
Lumens: 2192 lm; 100.2 lm/W

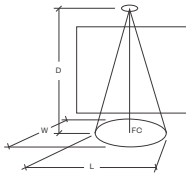


Candelas at Nadir

Deg	Candela
0	1706
5	1664
15	1437
25	1234
35	933
45	335

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).



30° Solite Lens

0° Aiming Angle Horizontal Footcandles

D	FC	L	W
5.0'	150	3.0	3.0
7.5'	72	4.2	4.2
10.0'	42	5.6	5.6
12.5'	27	6.9	6.9

50° Solite Lens

0° Aiming Angle Horizontal Footcandles

D	FC	L	W
5.0'	87	4.3	4.3
7.5'	40	6.3	6.3
10.0'	23	8.4	8.4
12.5'	15	10.7	10.7

75° Solite Lens

0° Aiming Angle Horizontal Footcandles

D	FC	L	W
5.0'	64	5.4	5.4
7.5'	30	7.9	7.9
10.0'	17	10.6	10.6
12.5'	11	13.6	13.6

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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 ---

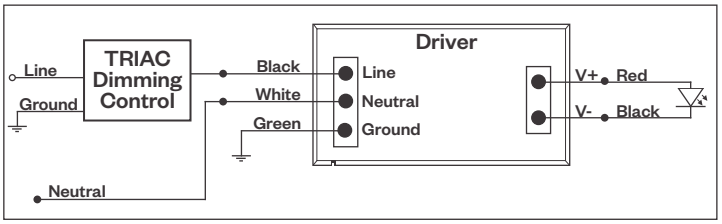
TRIAC *(Forward Phase)* DIMMING *(Standard)*

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"	

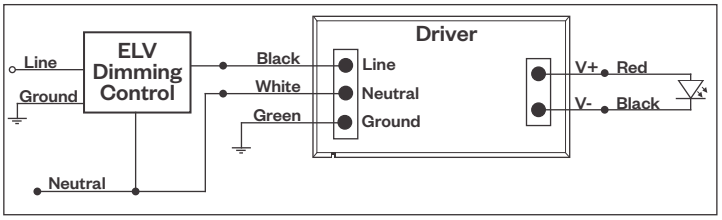
ELV - Electronic Low Voltage *(Reverse Phase)* DIMMING *(Standard)*

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 per dimming manufacturer

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 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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Dimming Compatibility *(continued)*

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

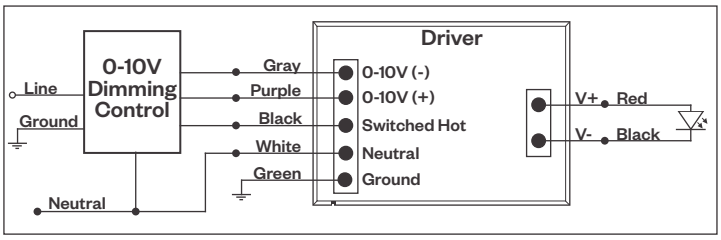
Notes:

- 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!**

Compatible Dimmers†:

Wall Box		Central System
Lutron "Diva" - DVSTV	Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface

0-10V Wiring Diagram



LUTRON LDE1 DIMMING

Integrates into Lutron EcoSystem building management

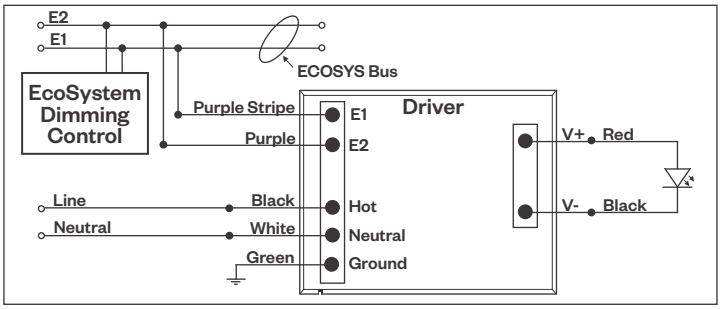
Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

Compatible Dimmers†:

Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

LDE1 *(HILUME-H-ECO)* EcoSystem Digital Control Wiring Diagram



DALI DIMMING

Digital control protocol allows individual fixture control

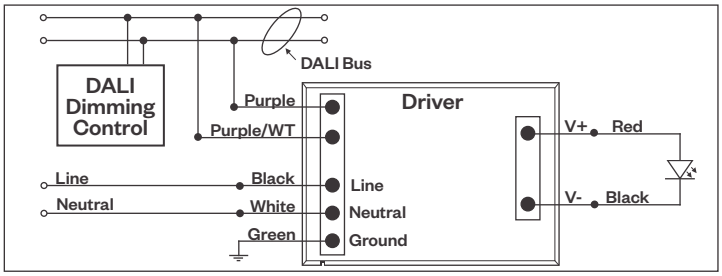
Notes:

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

Compatible Dimmers†:

Wall Box *(3-Wire Fluorescent)*	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

DALI Wiring Diagram



Notes:

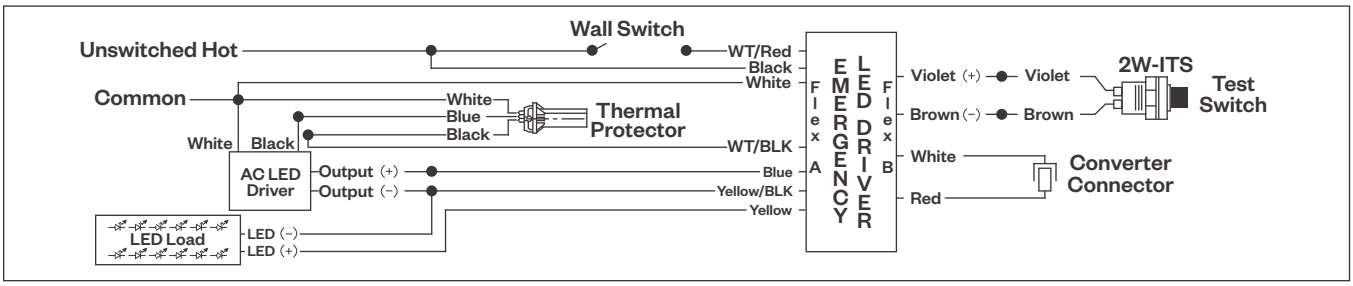
* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

Hornet® HP Select

Round Lensed Downlight

PROJECT:	TYPE:

Emergency Battery Pack

Wiring Diagram