

Hornet® HP Select

Square Lensed Downlight



PROJECT:

TYPE:

Features

The Hornet HP Select square downlight series provides powerful yet comfortable ambient lighting for retail and commercial spaces without compromising on budget or design. It delivers over 2,300 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.



Product Overview

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

Certifications



Fixture Summary

Performance Data

Watts	Delivered Lumens	LPW	CBCP	Color Temp-CRI
10	924	102.6	560	3000K-83
12	1232	102.6	747	3000K-83
16	1635	102.2	992	3000K-83
21	2156	102.7	1308	3000K-83
23	2369	109.3	1437	3000K-83

Data is based on 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 thermal protector, 2W power consumption.

Hornet® HP Select

Square Lensed Downlight



PROJECT:

TYPE:

Ordering Information - Housing/Frame

1	2	3	4	5	6
1 Model	2 Style	3 Wattage			
For New Construction	T trimmed	10			
HSE-S-NC (New Construction)	TL trimless	12			
HSE-S-CP (Chicago Plenum (CCEA) housing)	MWK ^{RF} millwork (for 1/2" - 11/16" ceiling thickness)	16			
HSE-S-IC (Insulated Ceiling/air tight, 16W max)	^{RF} Not available for use with Remodeler model	21			
For Existing Ceilings	^{RF} Consult factory for use in ceilings thicker than 11/16"	23 (not available for use with IC housing)			
HSE-S-REM (Remodeler)					
4 Voltage	5 Driver (for non-dimming, select LE/TE option)	6 Options/Accessories			
120	Wired	EM - emergency battery pack with remote test switch (not available for use with REM, CP or IC options)			
277	LE/TE TRIAC/ELV dimming	HB49 - hanger bars from min 29" to max 49" (not available for use with REM options)			
120/277 (for use with IC housing only)	HILUME-H-ECO - Lutron LDE1 Hi-lume®, 1% dim, Soft-On/Fade-to-Black	Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.			
	0-10V ^{T24} 0-10V dimming, 1% dim				
	DALI DALI dimming, 1% dim				
	Wireless				
	AWN-010* Lutron Athena wireless node, RF only, 0-10V				
	BN-BT-010* BubblyNet Bluetooth node, 0-10V				
	* Consult factory for lead time.				

Ordering Information - Trim

HSE-S-LD	1	2	3	4	5
1 Model	2 Style	3 Finish			
HSE-S-LD (lensed downlight)	T trimmed	Trimmed			
	TL trimless	Trimless/Millwork			
	MWK millwork	MBW matte black, white flange			
		MWW matte white, white flange			
		SLVW matte silver, white flange			
		MBB matte black, black flange			
		SLVS matte silver, silver flange			
4 Beam Spread	5 Color Temp				
75SOL 75° beam with solite lens	83 CRI	90+ CR			
	27 2700K-83	279 2700K-90+			
	30 3000K-83	309 3000K-90+			
	35 3500K-83	359 3500K-90+			
	40 4000K-83	409 4000K-90+			

Hornet® HP Select

Square Lensed Downlight



PROJECT:

TYPE:

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: **75SOL** - 75° beam with solite lens
Visually best with SLV reflector finish.

LED

Color Temp Options: 2700K, 3000K, 3500K, 4000K
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

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.

Hornet® HP Select

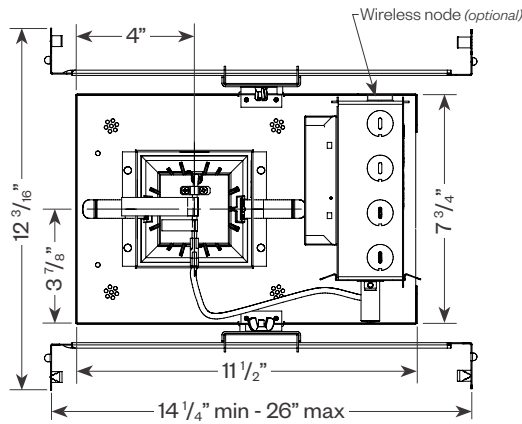
Square Lensed Downlight



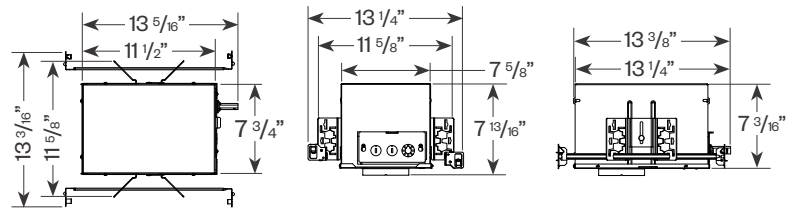
PROJECT:

TYPE:

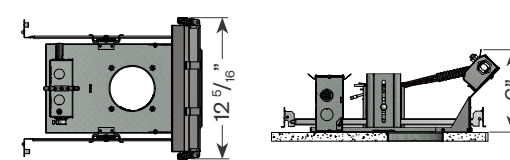
Product Details



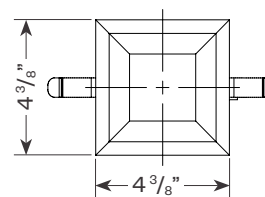
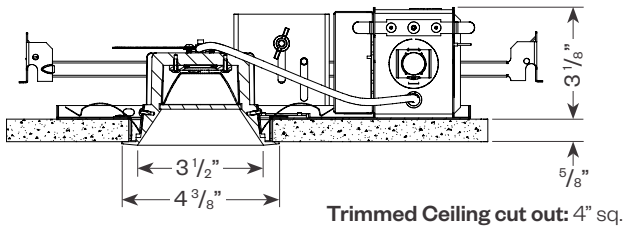
Optional CP or IC/AT housing



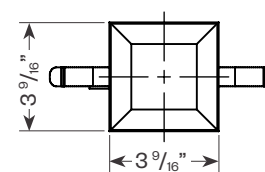
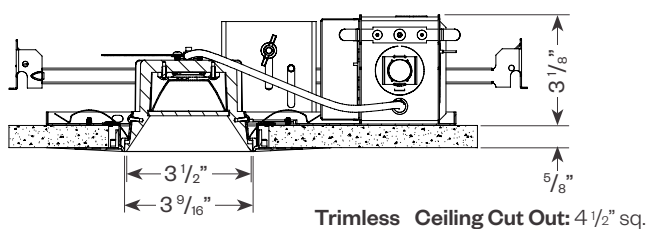
Emergency Battery Pack (EM) option



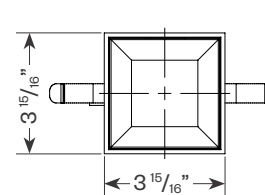
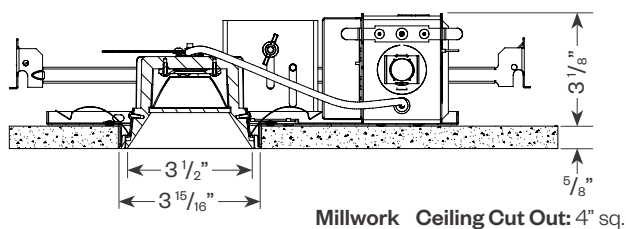
Trimmed



Trimless

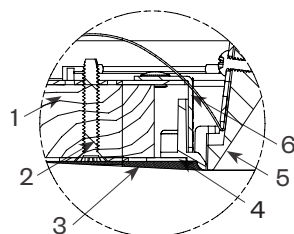


Millwork



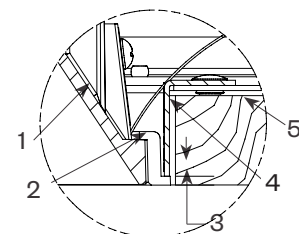
Plaster Frame Installation Detail (for trimless fixture only)

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



Hornet® HP Select

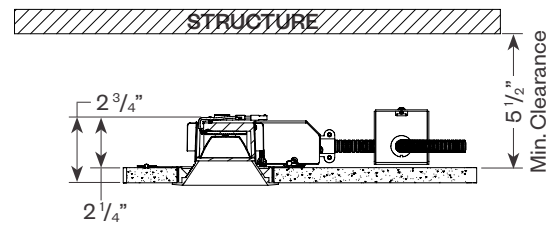
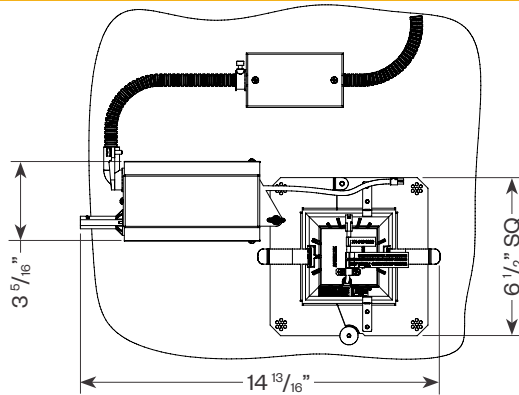
Square Lensed Downlight



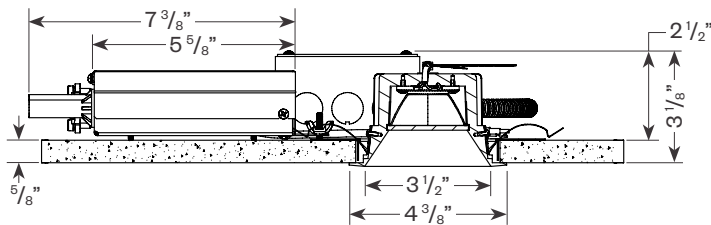
PROJECT:

TYPE:

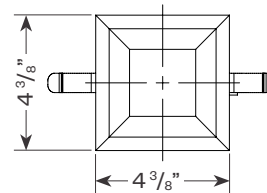
Product Details - Remodeler



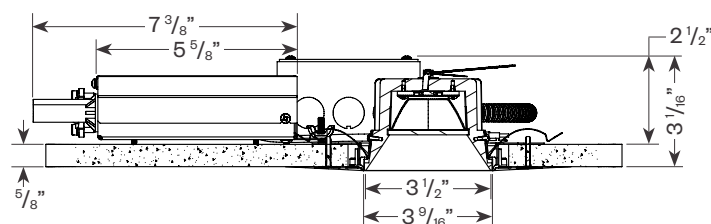
Trimmed



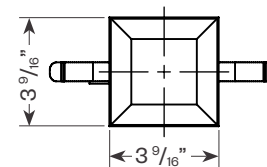
Trimmed Ceiling cut out: 4" sq.



Trimless

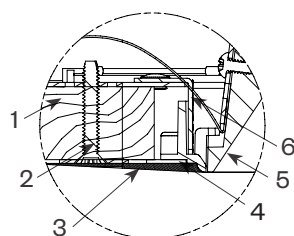


Trimless Ceiling Cut Out: 4 1/2" dia.



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



Hornet® HP Select

Square Lensed Downlight



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

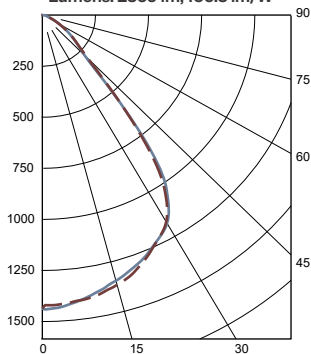
CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.66	0.83	0.86	0.90	0.93	0.65	0.70

23W LED, 3000K-83

75° Solite Lens

LTL # 14845017.01

Lumens: 2369 lm; 109.3 lm/W



Candelas at Nadir

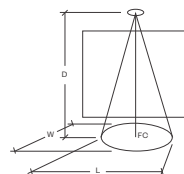
Deg	Candela
0	1437
5	1422
15	1344
25	1239
35	1000
45	281

Application Data

75° Solite Lens

0° Aiming Angle
Horizontal
Footcandles

D	FC	L	W
5.0'	56	6.2	6.1
7.5'	25	9.2	9.2
10.0'	15	12.4	12.4
12.5'	10	16.0	16.0



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).

Hornet® HP Select

Square Lensed Downlight



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 ---

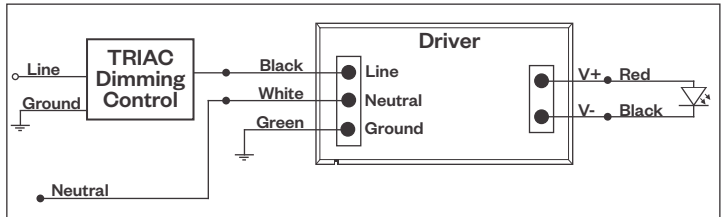
TRIAC (Forward Phase) DIMMING (Standard)

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"	

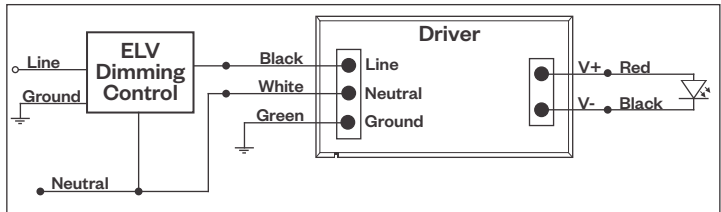
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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 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.

Hornet® HP Select

Square Lensed Downlight



PROJECT:

TYPE:

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.

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

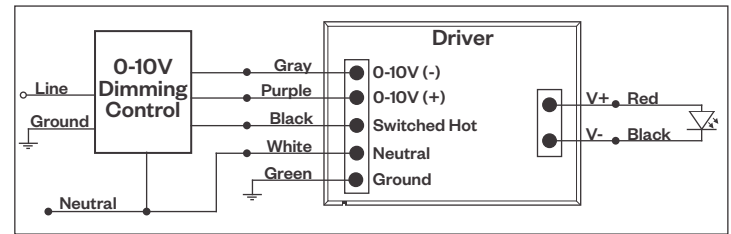
0-10V DIMMING

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	Central System
Lutron "Diva" - DVSTV	Lutron Grafik Eye with GRX-TVI Interface

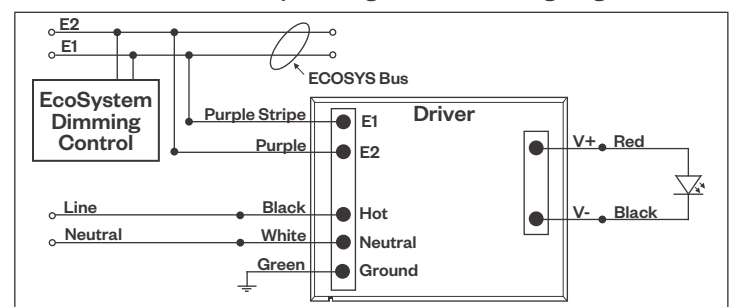
LUTRON LDE1 DIMMING

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!**

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



Compatible Dimmers*:

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

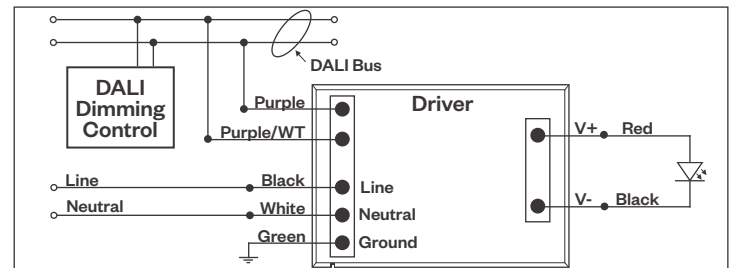
DALI DIMMING

Digital control protocol allows individual fixture control

Notes:

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

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

Square Lensed Downlight



PROJECT:

TYPE:

Emergency Battery Pack

Wiring Diagram

