

Hornet® 2.5

2.5" Square Shallow Trim Downlights



PROJECT:

TYPE:

Features

The Hornet 2.5 Shallow Trim expands our downlight series with a new standard wide, uniform distribution. Now available in optimized 60° and 80° beam spreads, it delivers smooth, consistent illumination ideal for broad ambient lighting applications. The fixture is fully accessible and serviceable from below the ceiling plane and maintains the same versatile installation options — trimmed, trimless, and millwork — ensuring seamless integration across a range of architectural conditions. With these additional wider beam spreads, the Hornet 2.5 Family gives architects and lighting designers greater flexibility to illuminate spaces, while preserving a clean, sophisticated, monolithic aesthetic.



HDL2.5-SDS



HDL2.5-SDS-TL/MWK

Product Overview

Type: Recessed Square Shallow Downlight
Wattage: 6W, 8W, 10W, 12W, 16W, 19W
Color Temp: 2700K, 3000K, 3500K, 4000K
CRI: 90+ typ.
Dimming: Wired: TRIAC & ELV, Hi-lume®, 0-10V, DALI
Wireless: Lutron Athena RF node, BubblyNet Bluetooth

Certifications



Fixture Summary

Performance Data

Watts	60°		80°	
	Delivered Lumens	LPW	Delivered Lumens	LPW
6	728	121.4	737	122.8
8	951	118.9	962	120.3
10	1173	117.3	1187	118.7
12	1396	116.3	1412	117.7
14	1618	115.6	1638	117
16	1821	113.8	1842	115.1
19	2023	109.8	2047	111.2

Data is based on 3000K-90+ IES files available on website.

Fixture Type

Round/Square	New Construction	Trim	Trimless	Millwork
Yes	Yes	Yes	Yes	Yes

See separate spec sheet for Square trims

Electrical Data

Voltage	6W		8W		10W		12W		14W		16W		19W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	6	0.05	8	0.07	10	0.08	12	0.10	14	0.12	16	0.14	19	0.16
277V	6	0.02	8	0.03	10	0.04	12	0.05	14	0.05	16	0.06	19	0.07

Electronic constant current LED driver.

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Ordering Information - Housing/Frame

1	2	3	4	5
1 Model	2 Style	3 Wattage		
HDL2.5-S-NC (New Construction) HDL2.5-S-CP (Chicago Plenum (CCEA) housing) HDL2.5-S-IC (Insulated Ceiling/air tight, 12W max)	T trimmed TL trimless (patent pending screwless mud-ring) MWK millwork (for 1/2" - 11/16" ceiling thickness) MWK1 millwork (for 3/4" - 1-1/2" ceiling thickness)	6 8 10 12 14† 16† 19† † Not available for use with IC.		
4 Driver (for non-dimming, select LE/TE option)	5 Options/Accessories			
<u>Wired</u> LE/TE TRIAC/ELV dimming HILUME-P-ECO - Lutron Hi-lume® EcoSystem Premier 0.1% dim with soft on and fade to black 0-10V 0-10V dimming, 1% dim 0-10V-DD* 0-10V dimming, 0.1% deep dimming DALI DALI dimming, 1% dim DALI-DD* DALI dimming, 0.1% deep dimming <u>Wireless</u> AWN-R-010* Lutron Athena wireless node, RF only, 0-10V BN-BT-010* BubblyNet Bluetooth node, 0-10V * Consult factory for lead time.	HB49 - hanger bars from min 29" to max 49" Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.			

Ordering Information - Trim

1	2	3	4	5	6
1 Model	2 Style	3 Finish			
HDL2.5-SDS	T trimmed TL trimless MWK millwork	<u>Trimmed</u> MWW matte white, white flange MBW matte black, white flange SLVW matte silver, white flange MBB matte black, black flange SLVS matte silver, silver flange	<u>Trimless/Millwork</u> MB matte black MW matte white SLV matte silver		
4 Beam Spread	5 Color Temp	6 Options/Accessories			
60D very wide flood 60° 80D ultra wide flood 80°	279 2700K-90+ 309 3000K-90+ 359 3500K-90+ 409 4000K-90+	SOL solite beam softening LS linear spread lens SHW shower (only available for (T) trimmed style)			



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Specifications

Application

Retail, commercial and hospitality ambient lighting.

Optical

Beam spreads: Very Wide Flood, 60°; Ultra Wide Flood, 80°

LED

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

CRI: 90+ typ.

R9 Values: 55 (92 CRI)

Binning: 3 MacAdam (SDCM)

Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

Electrical

Wattage: 6W, 8W, 10W, 12W, 14W, 16W, 19W

Electronic constant current LED driver, universal operating voltage 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.

Drivers

Universal Operating Voltage 120/277VAC.

Smooth linear dimming curve to minimum dim of 1% or 0.1%.

UL8750 with Class 2 output.

Complies with FCC Part 15, Class A.

UL Listed Class P.

Built-in protection feature (short circuit, overload, Thermal, 2.5kV surge).

See dimming compatibility page for additional information.

Finish

Powder coat paint/wet paint

Consult factory for custom finishes

Mounting

26" Hanger bars included.

Optional **HB49** - hanger bars from min 29" to max 49" available.

Trimmed Fixture:

For use in grid or sheetrock ceilings, 1/2" to 1-1/2" standard.

Trimless Fixture:

For use in sheetrock ceilings, max ceiling thickness 1-1/2".

Patent pending screwless mud-ring.

Millwork Fixture:

Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material. Max thickness 1-1/2".

Ceilings thicker than 3/4" will require an extension collar.

Consult factory for ceilings above 1-1/2" thickness (downlight & wall wash only).

Certifications

CSA damp as tested to UL 1598 standards

IC/AT rated (optional, 12W max)

Damp location

Warranty

5 year limited warranty (see Amerlux website for details)

Accessories (not available for SW model)



Solite Lens/Film, Linear Spread Lens



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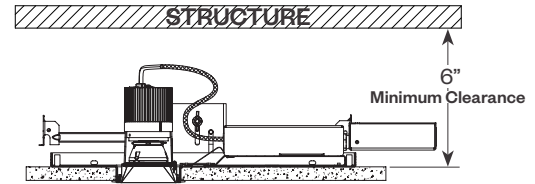
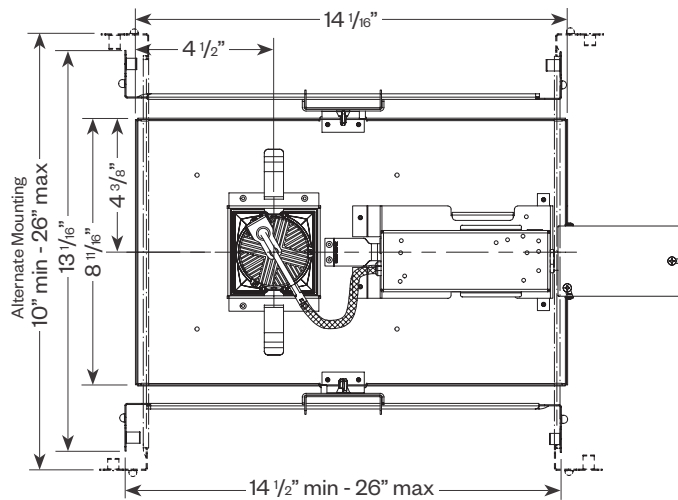
2.5" Square Shallow Trim Downlights



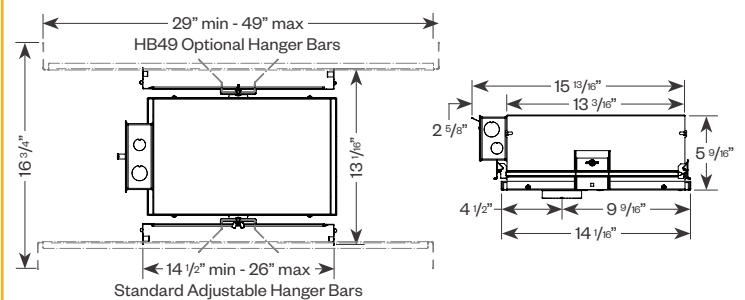
PROJECT:

TYPE:

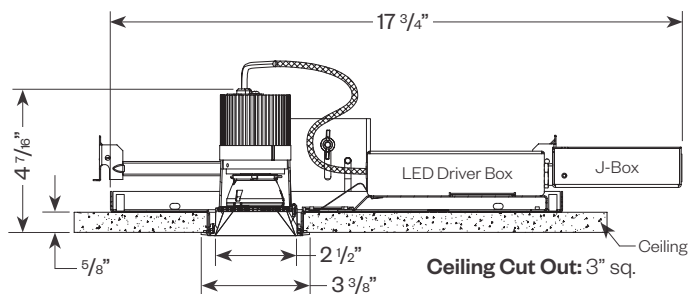
Product Details - Downlight



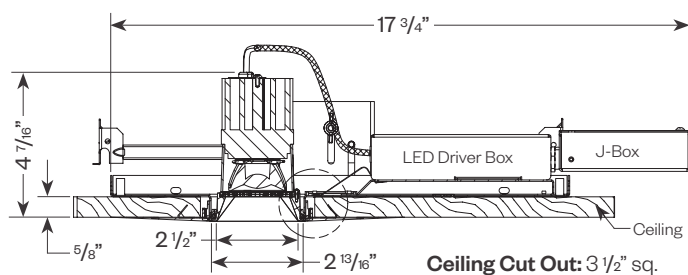
IC/AT & CP Housing



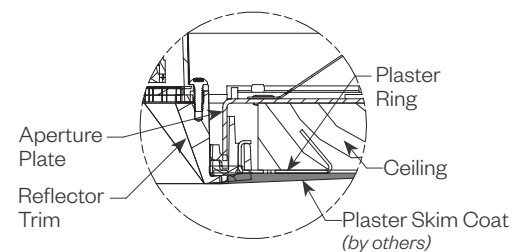
Downlight Trimmed



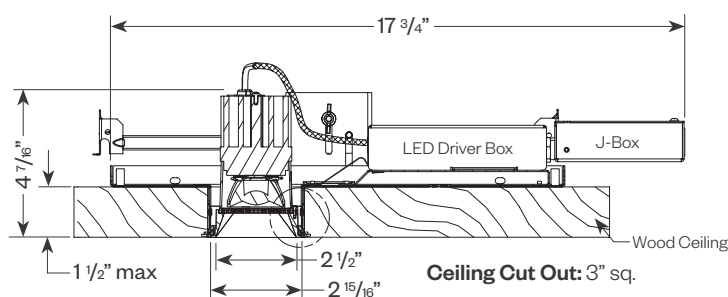
Downlight Trimless



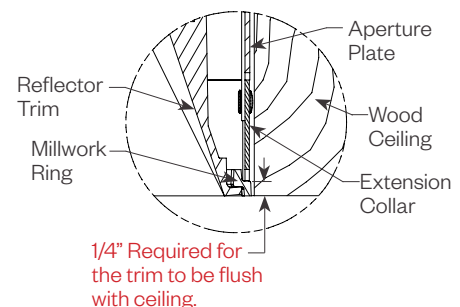
Trimless Detail



Downlight Millwork



Millwork Detail



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Performance Data

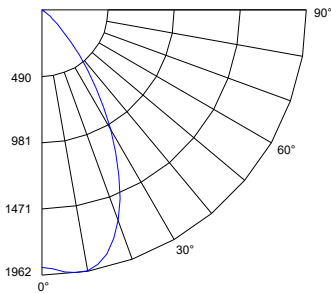
Multiplying Factors: (Multiplying Factor is based on 3000K-90+ 120V IES file on website)

Wattage:	6W	8W	10W	12W	14W	16W	19W
Factor:	0.36	0.47	0.58	0.69	0.80	0.90	1.0

CCT:	2700K-90+	3000K-90+	3500K-90+	4000K-90+
Factor:	1.005	1.000	1.016	1.029

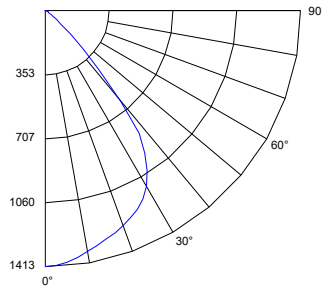
19W LED, 3000K-90+

Very Wide Flood, 60°
106397163CRT-003
Lumens: 2023



Candelas at Nadir	
Deg	Candela
0	1904
5	1943
15	1858
25	1341
35	689
45	209

Ultra Wide Flood, 80°
106397163CRT-004
Lumens: 2047



Candelas at Nadir	
Deg	Candela
0	1413
5	1394
15	1306
25	1210
35	958
45	301

Application Data

Notes and Definitions:

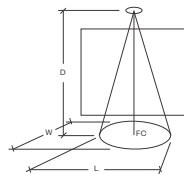
Beam spread is to 50% center beam candlepower (CBCP).

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).



Very Wide Flood	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
	5.0'	76	4.9	4.9
	7.5'	34	7.3	7.3
	10.0'	19	9.7	9.7
	12.5'	13	12.2	12.2

Ultra Wide Flood	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
	5.0'	54	6.0	6.0
	7.5'	25	9.0	9.0
	10.0'	14	12.1	12.1
	12.5'	9	15.7	15.7

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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 ---

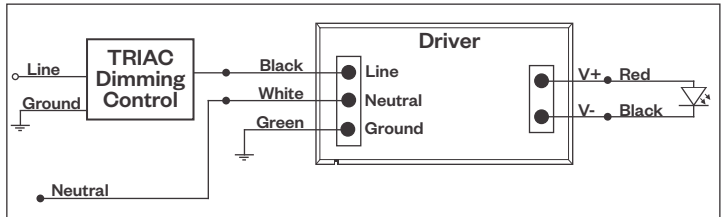
TRIAC (Forward Phase) DIMMING (Standard)

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"	

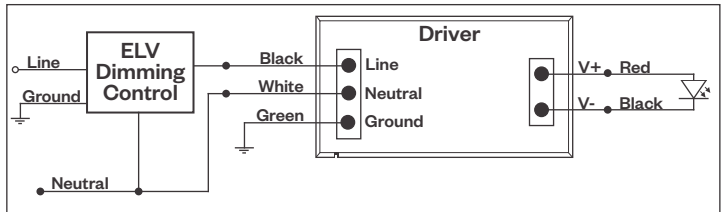
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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.



Delta Intelligent Building Technologies

178 Bauer Drive, Oakland, NJ 07436 • P: 973-882-5010 F: 973-882-2605 • amerlux.com
Amerlux reserves the right to change details that do not affect overall function and performance.
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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.

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

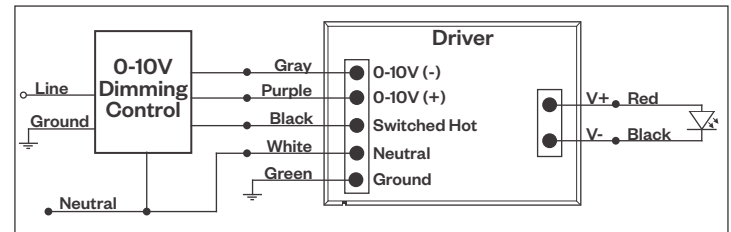
0-10V DIMMING

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

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

Central System

Lutron Grafik Eye with GRX-TVI Interface

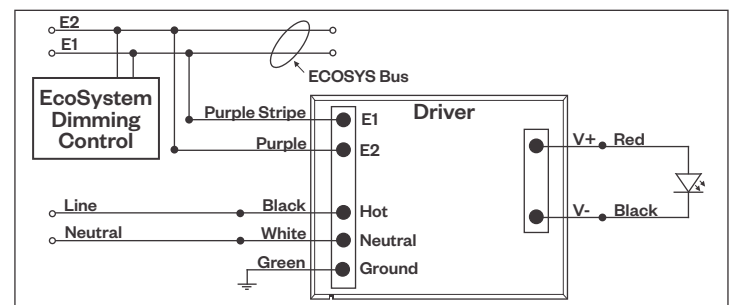
LUTRON LDE1 DIMMING

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

Pow Pak Dimming Modules

Central System

Lutron EcoSystem compatible controls

Energj Savr Node

Grafik Eye QS/Homeworks

QS Control Unit

Quantum Hub

Homeworks QS/My Room

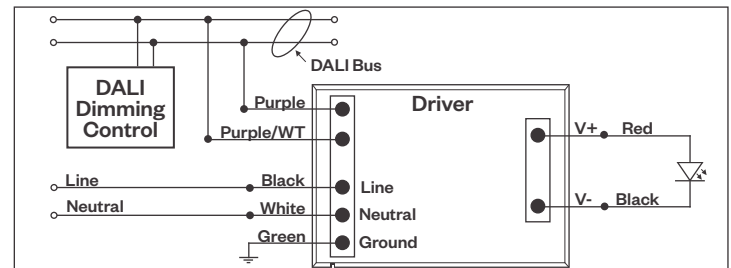
DALI DIMMING

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.