Hornet® 2.5
2.5" Round Adjustable, **Super Narrow Spot**

amerlux

PROJECT:	TYPE:

Features

A tight sub-10° with high Center Beam Candlepower and no spill or secondary beam preventing the light from spreading beyond the intended area, creating a clean and well-defined light pattern. The Hornet 2.5 Super Narrow Spot allows for precise control over the direction of the light, allowing designers to create dramatic effects or draw attention to specific elements. It's a powerful lighting solution that enhances the visual impact of your space and adds a touch of elegance and sophistication to your decor.

HDL2.5-RA

HDL2.5-RA-TL/MWK

Product Overview

Type:	Recessed Round Adjustable
Wattage:	6W, 9W
CBCP:	11,572
Color Temp:	2400K, 2700K, 3000K, 3500K
CRI:	90+ typ.
Dimming:	**Wired:** TRIAC & ELV, Hi-lume®, 0-10V, DALI
	Wireless: Lutron Athena RF node, Bluetooth SIG 5.0

Certifications

CSA c us

5 year limited warranty
AMERLUX LED

Fixture Summary

Performance Data

Watts	Delivered Lumens	LPW	CBCP	Color Temp, CRI
6	337	48.1	9026	3000K, 90+
9	432	49.1	11,572	3000K, 90+

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		9W	
	System Watts	Amps	System Watts	Amps
120V	6	0.05	9	0.08
277V	6	0.02	9	0.03

Electronic constant current LED driver.

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.
LIT-2419 • 04/08/25 • Page 1 of 7

Hornet® 2.5

2.5" Round Adjustable, **Super Narrow Spot**

PROJECT:	TYPE:

Ordering Information - Housing/Frame

HDL2.5-R-NC-SNSP . _____ . _____ . _____ . _____

  1   **2**   **3**   **4**   **5**

1	Model
	HDL2.5-R-NC-SNSP *(New Construction)*

2	Style
	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)*

3	Wattage
	6
	9

4	Driver *(for non-dimming, select LE/TE option)*
	<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> *(New Construction only)*
	AWNR-010* Lutron Athena wireless node, RF only, 0-10V
	BN-BT-010* BubblyNet Bluetooth node, 0-10V
	DBT* Delta Bluetooth SIG 5.0 compatible, 1% dimming, 120-277VAC, flying lead antenna
	* Consult factory for lead time.

5	Options/Accessories
	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

HDL2.5-RA-SNSP . _____ . _____ . _____ . _____

  1   **2**   **3**   **4**   **5**

1	Model
	HDL2.5-RA-SNSP *(adjustable)*

2	Style
	T trimmed
	TL trimless
	MWK millwork

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

4	Color Temp
	249 2400K-90+
	279 2700K-90+
	309 3000K-90+
	359 3500K-90+

5	Options/Accessories
	HEX hexcell louver
	SOL solite beam softening

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.
LIT-2419 • 04/08/25 • Page 2 of 7

Hornet® 2.5
2.5" Round Adjustable, **Super Narrow Spot**

PROJECT:	TYPE:

Specifications

Application

Retail and commercial ambient, hospitality lighting

Optical

Beam spreads: Super Narrow Spot 9.6°
Tilt: 40° max

LED

Color Temp Options: 2400K, 2700K, 3000K, 3500K
CRI: 90+ typ.
R9 Values: 55 *(92 CRI)*
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

Electrical

Wattage: 6W, 9W
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

Hexcell Louver, Solite Lens

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.
LIT-2419 • 04/08/25 • Page 3 of 7

Hornet® 2.5

2.5" Round Adjustable, **Super Narrow Spot**

amerlux

PROJECT:	TYPE:

Product Details - Adjustable

14 1/16"
4 1/2"
4 3/8"
13"
8 11/16"
360° rotation
14 1/2" min - 26" max

STRUCTURE
6" Minimum Clearance

IC/AT & CP Housing

29" min - 49" max
HB49 Optional Hanger Bars
16 3/4"
13 3/16"
15 13/16"
13 3/16"
2 5/8"
5 9/16"
4 1/2"
9 9/16"
14 1/16"
14 1/2" min - 26" max
Standard Adjustable Hanger Bars

Adjustable Trimmed

17 3/4"
5"
LED Driver Box
J-Box
Ceiling
5/8"
40°
Ø2 1/2"
Ø3 3/8"
Ceiling Cut Out: 3" dia.
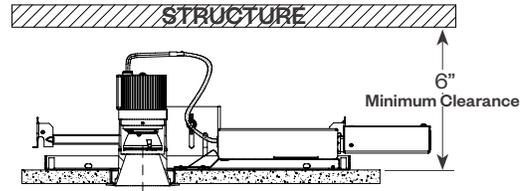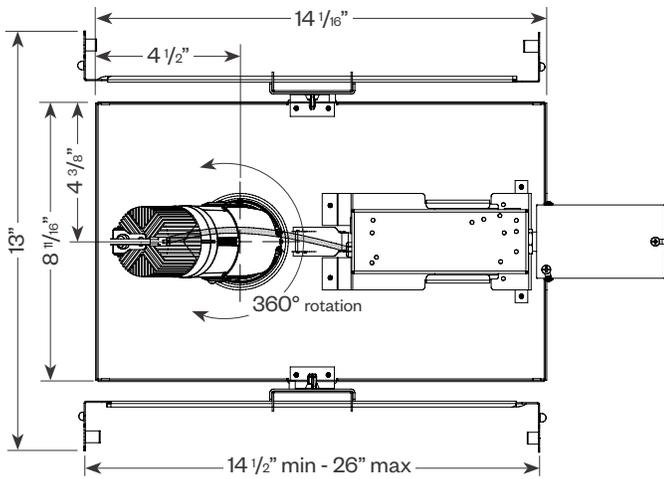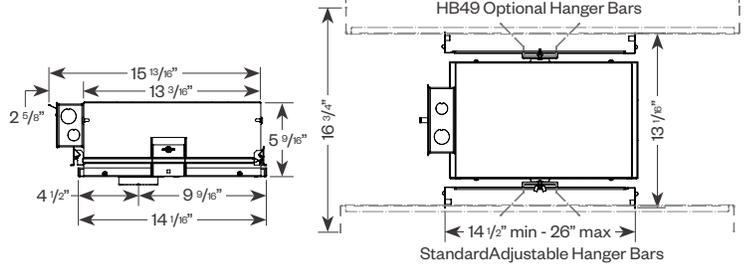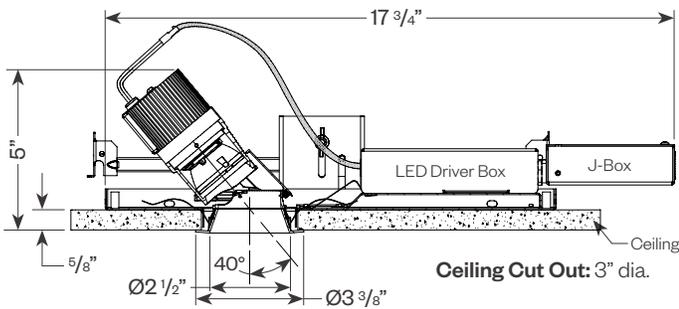
Note: 3/4" maximum ceiling thickness recommended for optimal adjustability.
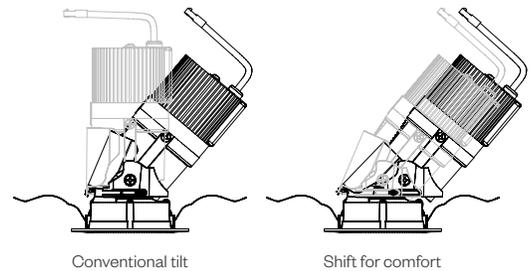
Conventional tilt   Shift for comfort

Adjustable Trimless

17 3/4"
5"
LED Driver Box
J-Box
Ceiling
5/8"
40°
Ø2 1/2"
Ø2 13/16"
Ceiling Cut Out: 3 1/2" dia.

Trimless Detail

Aperture Plate
Reflector Trim
Ceiling
Plaster Ring
Plaster Skim Coat *(by others)*

Adjustable Millwork

17 3/4"
5 1/8"
LED Driver Box
J-Box
Wood Ceiling
5/8"
40°
Ø2 13/16"
Ø2 1/2"
Ceiling Cut Out: 3" dia.

Millwork Detail

Aperture Plate
Reflector Trim
Wood Ceiling
Millwork Ring
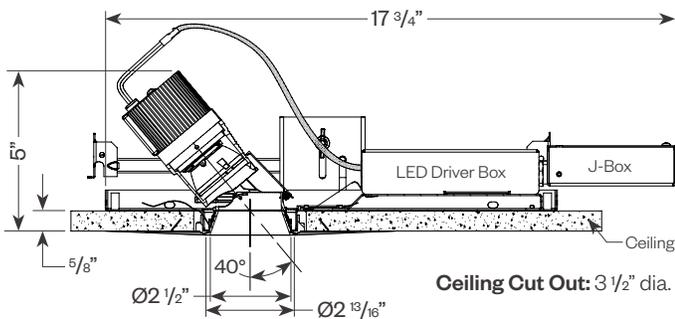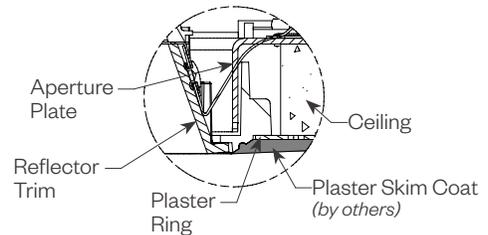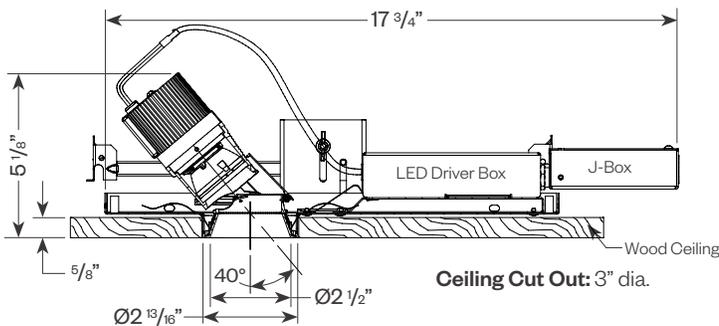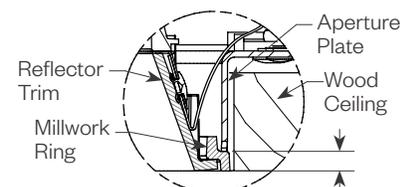
1/8" gap required between edge of aperture & ceiling plane for the trim to be flush with ceiling.

Delta Intelligent Building Technologies

Hornet® 2.5
2.5" Round Adjustable, **Super Narrow Spot**

amerlux

PROJECT:	TYPE:

Performance Data

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

Wattage:	6W	9W
Factor:	0.78	1.0

CCT:	2400K-90+	2700K-90+	3000K-90+	3500K-90+
Factor:	0.83	0.96	1.0	1.05

9W LED, 3000K-90+

Super Narrow Spot (SNSP), 9.6°
LTL # 15657122.13
Lumens: 432
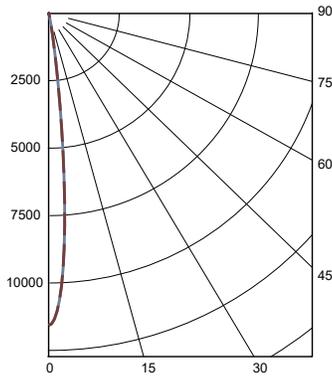
Candelas at Nadir

Deg	Candela
0	11570
5	6071
15	114
25	20
35	4
45	1

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).
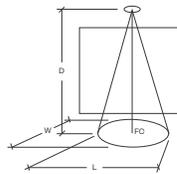
0° Aiming Angle
Horizontal
Footcandles

	D	FC	L	W
SUPER NARROW SPOT	5.0'	181	1.3	1.3
	7.5'	126	1.6	1.6
	10.0'	87	2.0	2.0
	12.5'	62	2.5	2.5

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.
LIT-2419 • 04/08/25 • Page 5 of 7

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
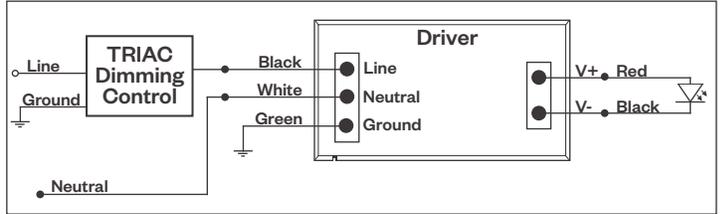
Compatible Dimmers†:

| 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
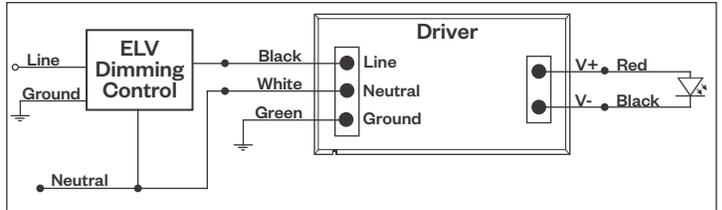
Compatible Dimmers†:

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.

Δ **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.
LIT-2419 • 04/08/25 • Page 6 of 7

Hornet® 2.5
2.5" Round Adjustable, **Super Narrow Spot**

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
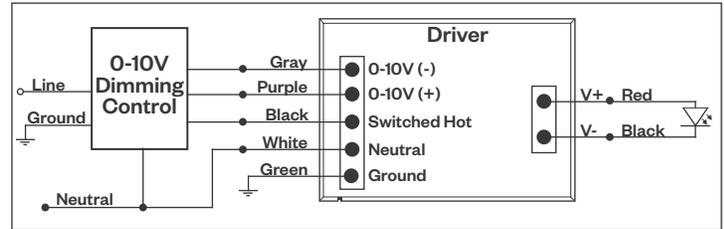
Compatible Dimmers†:

| Wall Box		Central System
Lutron "Diva" - DVSTV	Leviton Renoir II 0-10V	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**
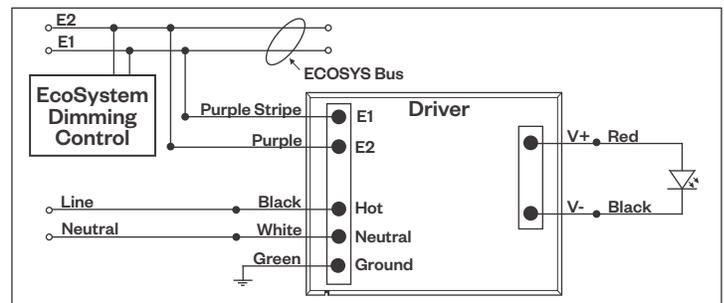
Compatible Dimmers†:

| Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi 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

Compatible Dimmers†:

Wall Box *(3-Wire Fluorescent)*	Central System
Leviton CD250 Controller	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 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.
LIT-2419 • 04/08/25 • Page 7 of 7