

# Hornet<sup>®</sup> HP

Square Downlights

Dim-To-Warm

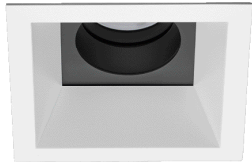


## Features

Add ambiance to any hospitality, residential, retail or commercial space. Amerlux Hornet HP Downlight Dim-To-Warm option offers a lower kelvin temperature as you dim the lights. An adaptable light source in a cost-effective, solid state lighting package. The Dim-To-Warm option can tap into the powerful mediums of light and color to enhance the experience, well-being, and human emotion. Amerlux Dim-To-Warm allows designers to simulate the familiar glow and dimming of incandescent lamps. Available for trimmed, trimless or millwork applications.

## Product Overview

Type:	Recessed Square Downlight
Wattage:	15W
Lumen Output:	699 lm max (SA trim, VNF optic)
Color Temp:	3000K to 1800K
CRI:	95 typ.
Dimming:	TRIAC & ELV (120/277VAC) - 5% Dim Lutron Hi-lume <sup>®</sup> H Series/EcoSystem - 1% dim with soft on, fade to black, 120/277VAC 0-10V (120/277VAC) - 1% Dim DALI (120/277VAC) - 1% Dim



Downlight



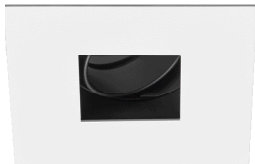
Adjustable  
*(Trimless version shown)*



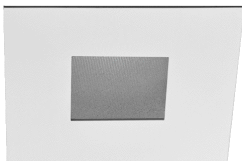
Adjustable  
*(Millwork version shown)*

## PROJECT:

## TYPE:



Pinhole Adjustable



Pinhole Adjustable Shower

## Fixture Type

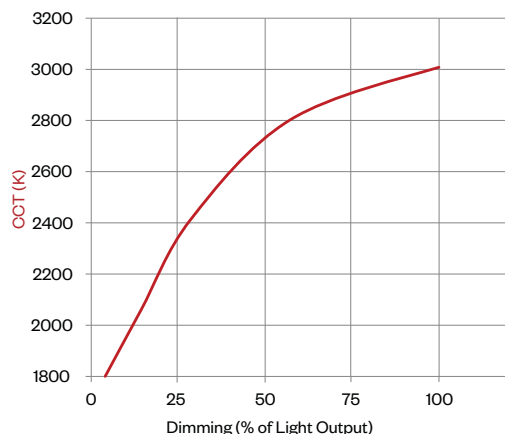
New Construction	Remodeler	Trim	Trimless
Yes	Yes	Yes	Yes

## Electrical Data

	15W	
	System Watts	Amps
120V	15	0.13
277V	16	0.06

*Electronic constant current LED driver  
Includes 2W thermal protector*

## Dim-To-Warm CCT Curve





# Hornet® HP

Square Downlights, Dim-To-Warm



## PROJECT:

## TYPE:

### Specifications

#### Application

Hospitality and commercial ambient, accent 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 spreads:** Very Narrow Flood, 18°; Medium Flood, 25°; Flood, 35° (28° in RPA); Wide Flood, 45° (see photometric data, pgs 8-11, for exact beams by fixture type)
- Adjustable Trims** - 0-30° tilt (0-20° in RPA), 358° rotation

#### LED

- Color Temp Options:**
  - 3000K (Dims to 1800K)
- CRI: 95 typ. ( $\pm 3$  across dimming range)
- R9 Values: 85 (95 CRI)
- Binning: 3 MacAdam (SDCM)
- Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

#### Electrical

- Wattage:** 15
- 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 input voltage but thermal protector is voltage specific

#### Drivers

- LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
- 0-10V, Lutron and DALI systems also available
- See pages 12-14 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" standard

#### Trimless Fixture (not available with Shower trim):

For use in sheetrock ceilings, max ceiling thickness 5/8"

#### Millwork Fixture:

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

**Not available for use with Remodeler model**

#### Certifications

- CSA damp as tested to UL 1598 standards
- IC/AT rated (optional)
- Damp location
- JA10 compliant for Title 24 per UL Test 13005791.01A (available upon request)

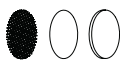
#### Warranty

5 year limited warranty

#### Emergency Battery Pack (EM)

Powers fixture at 5.1 watts (approx. 250 Lm) for 90 minutes (not for use with REM, CP or IC/AT versions)

### Accessories (diagrams show installation order)



Hexcell, optical film, solite lens

# Hornet<sup>®</sup> HP

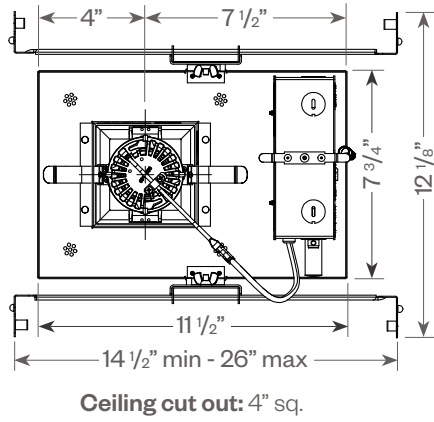
Square Downlights, Dim-To-Warm



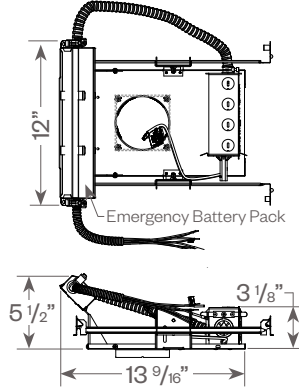
**PROJECT:**

**TYPE:**

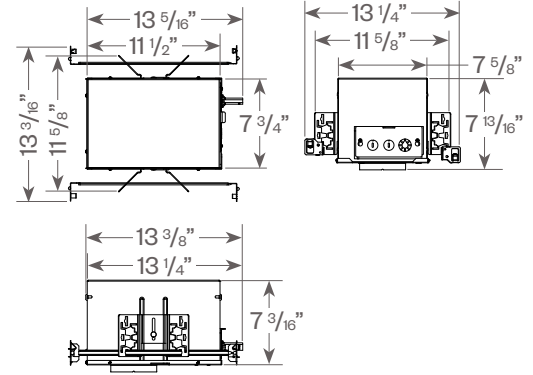
**Hornet HP Downlight: Square**



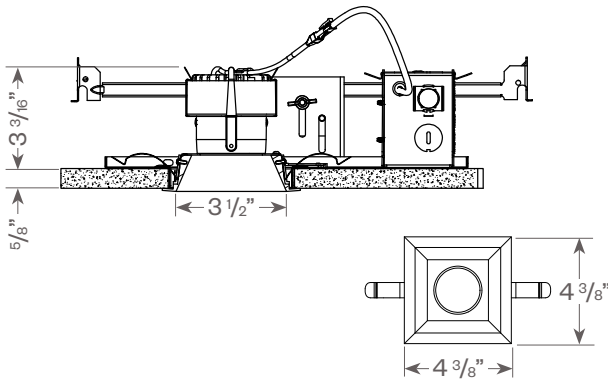
**Frame with Emergency Battery Pack**



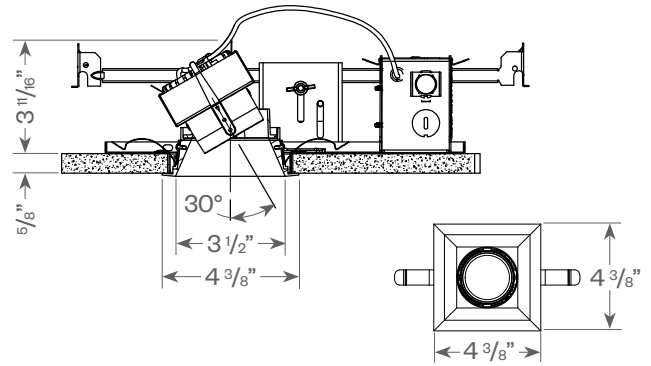
**Optional CP or IC/AT housing**



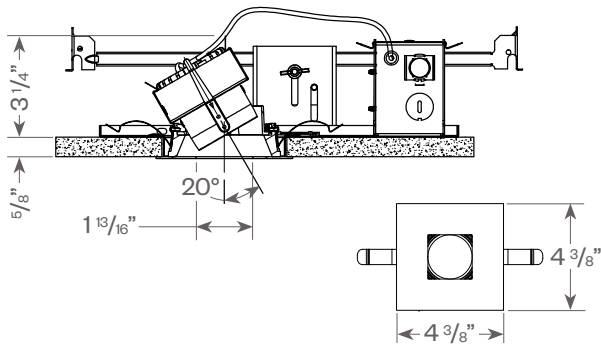
**Downlight**



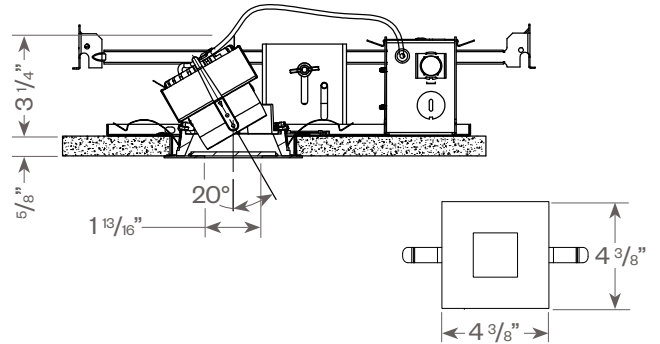
**Adjustable**



**Pinhole Adjustable**



**Pinhole Adjustable Shower**

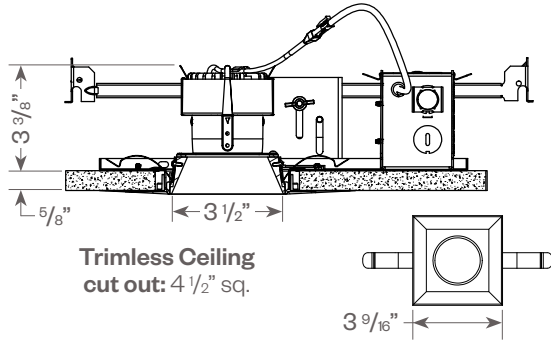


**PROJECT:**

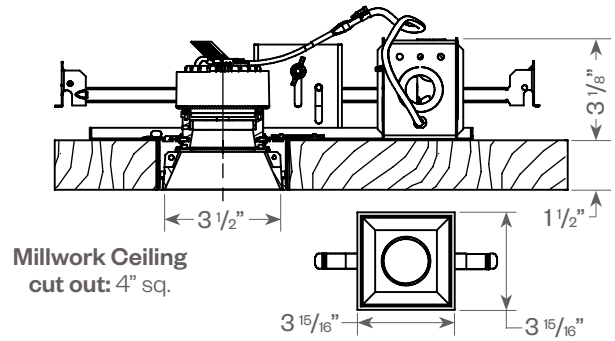
**TYPE:**

**Hornet HP Square Downlight:**

**Trimless**

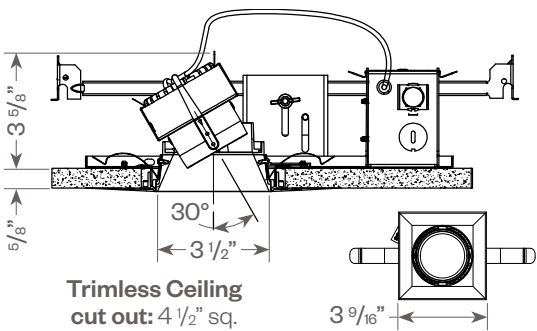


**Millwork**

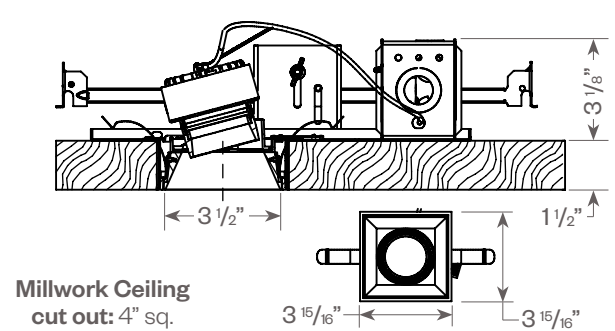


**Hornet HP Square Adjustable:**

**Trimless**

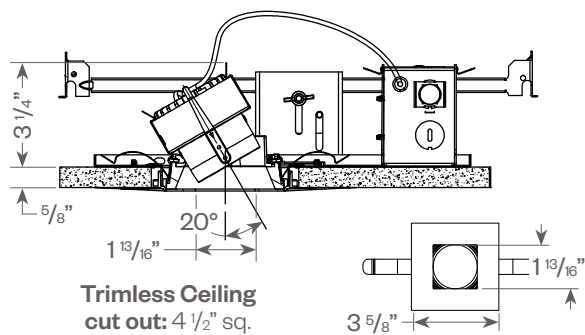


**Millwork**

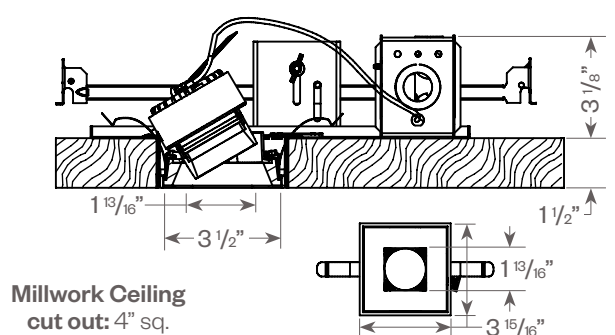


**Hornet HP Square Pinhole Adjustable:**

**Trimless**

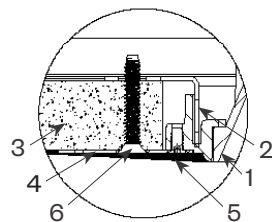


**Millwork**



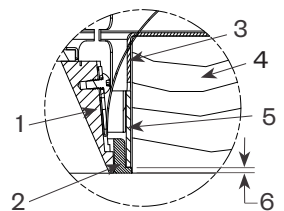
**Plaster Frame Installation Detail (for trimless fixture only)**

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



**Millwork Detail**

1. Reflector Trim
2. Millwork Ring
3. Aperture Plate
4. Wood Ceiling 2" Max
5. Extension collar (see ordering information for ceiling thicknesses)
6. 1/16" required for trim to be flush with ceiling



# Hornet<sup>®</sup> HP

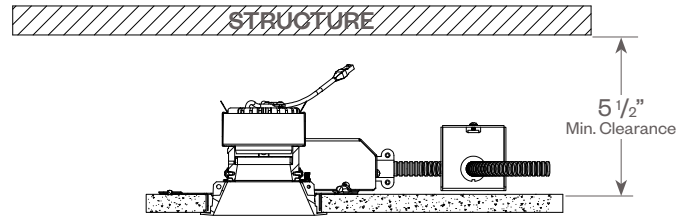
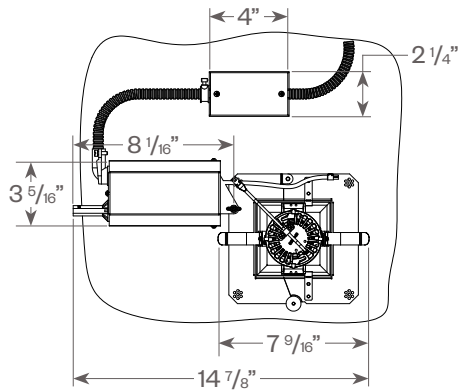
Square Downlights, Dim-To-Warm



**PROJECT:**

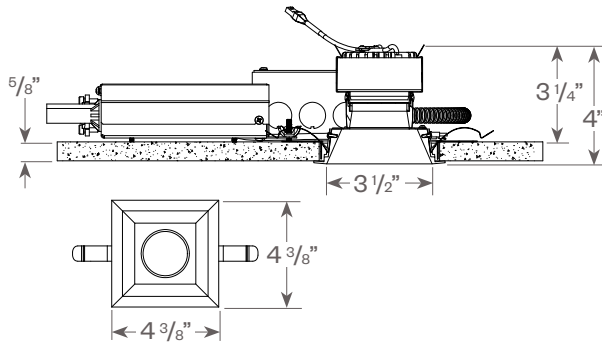
**TYPE:**

## Hornet HP Downlight: Remodeler

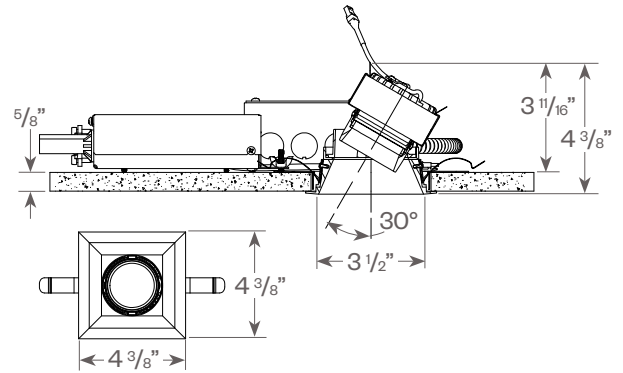


Ceiling cut out: 4" sq.

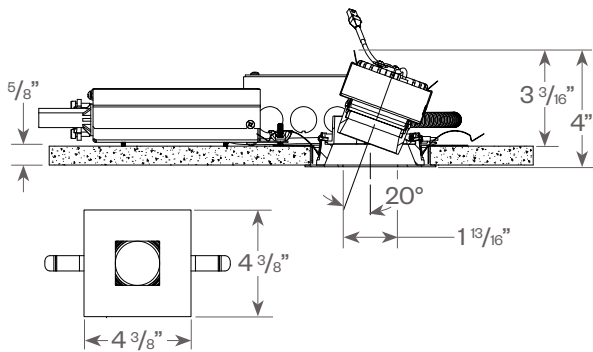
### Downlight



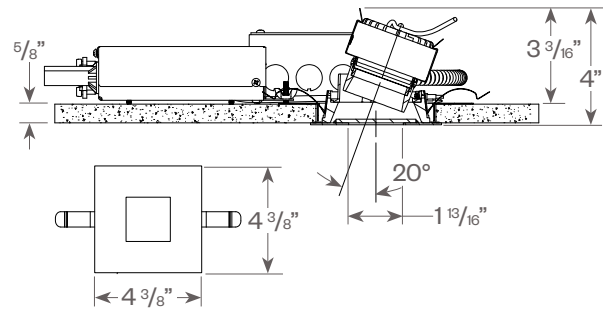
### Adjustable



### Pinhole Adjustable



### Pinhole Adjustable Shower



# Hornet<sup>®</sup> HP

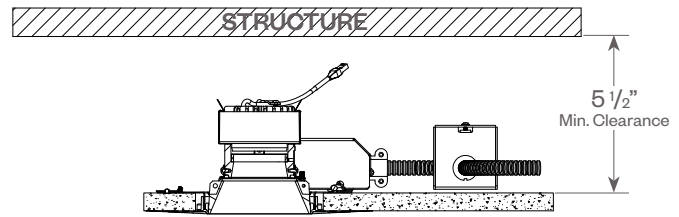
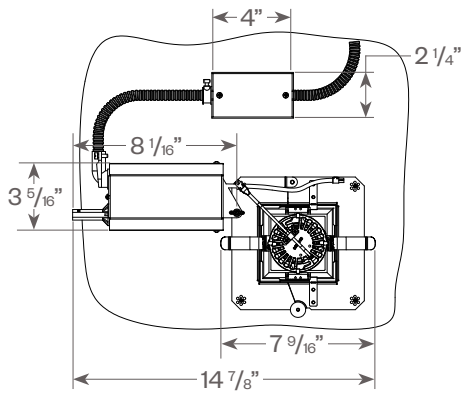
Square Downlights, Dim-To-Warm



## PROJECT:

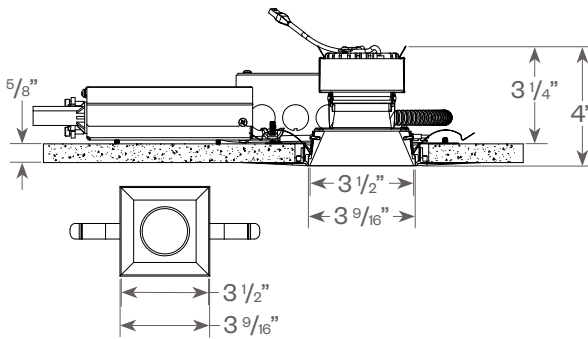
## TYPE:

### Hornet HP Downlight: Remodeler Trimless

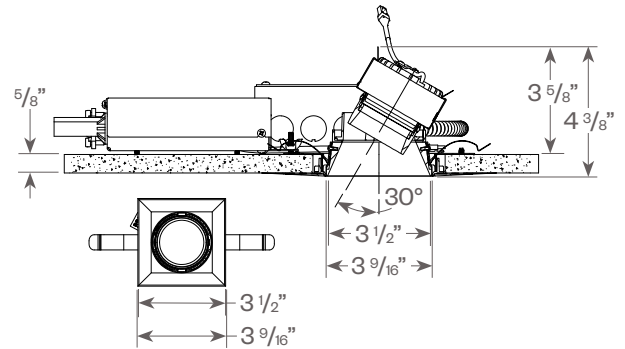


Ceiling cut out: 4 1/2" sq.

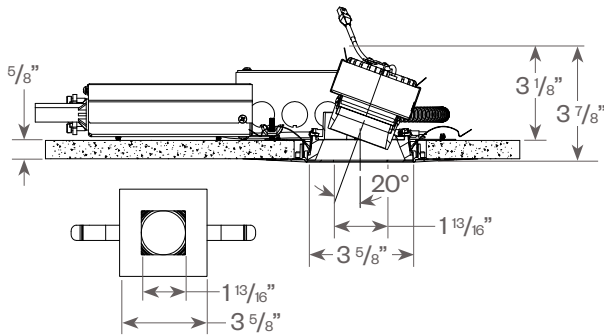
### Downlight



### Adjustable

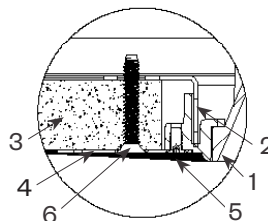


### Pinhole Adjustable



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

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



**PROJECT:**

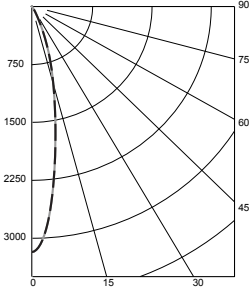
**TYPE:**

**Hornet HP Square Downlight:**

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

**15W LED, 3000K-95**

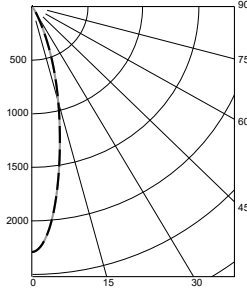
**Very Narrow Flood (VNF)**  
Distribution, 18°  
LTL #11919582.12  
Lumens: 672



**Candelas at Nadir**

Deg	Candela
0	3179
5	2638
15	1030
25	252
35	43
45	10

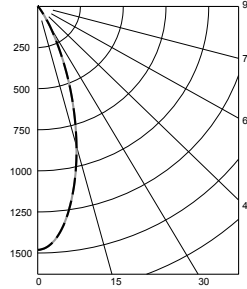
**Medium Flood (MFL)**  
Distribution, 25°  
LTL #11919582.13  
Lumens: 609



**Candelas at Nadir**

Deg	Candela
0	2291
5	2024
15	942
25	267
35	50
45	11

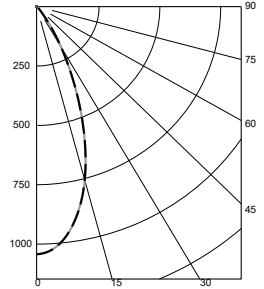
**Flood (FL)**  
Distribution, 35°  
LTL # 11919582.14  
Lumens: 582



**Candelas at Nadir**

Deg	Candela
0	1481
5	1395
15	882
25	331
35	63
45	13

**Wide Flood (WF)**  
Distribution, 45°  
LTL # 11919582.15  
Lumens: 540

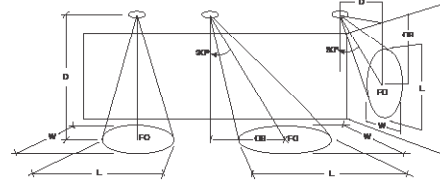


**Candelas at Nadir**

Deg	Candela
0	1042
5	1007
15	751
25	359
35	85
45	15

**Application Data:**

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Very Narrow Flood	5.0'	122	1.8	1.8
	7.5'	55	2.9	2.9
	10.0'	31	3.7	3.7
	12.5'	20	4.6	4.6
Medium Flood	5.0'	88	2.3	2.3
	7.5'	40	3.3	3.3
	10.0'	23	4.4	4.4
	12.5'	15	5.5	5.5
Flood	5.0'	57	3.0	3.0
	7.5'	26	4.4	4.4
	10.0'	15	5.7	5.7
	12.5'	9	7.2	7.2
Wide Flood	5.0'	40	3.4	3.4
	7.5'	18	5.1	5.1
	10.0'	10	6.9	6.9
	12.5'	7	8.5	8.5



**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.



**PROJECT:**

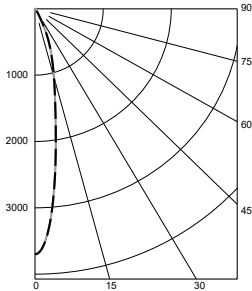
**TYPE:**

**Hornet HP Square Adjustable:**

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

**15W LED, 3000K-95**

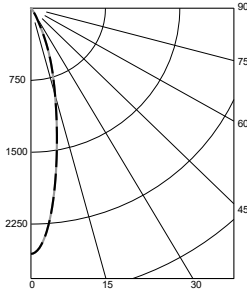
**Very Narrow Flood (VNF)**  
Distribution, 18°  
LTL #11919582.16  
Lumens: 699



**Candelas at Nadir**

Deg	Candela
0	3704
5	2907
15	1010
25	285
35	42
45	12

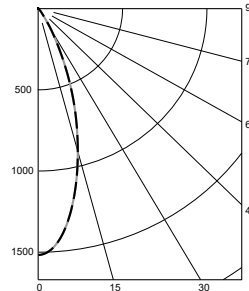
**Medium Flood (MFL)**  
Distribution, 25°  
LTL #11919582.17  
Lumens: 652



**Candelas at Nadir**

Deg	Candela
0	2561
5	2215
15	967
25	296
35	49
45	14

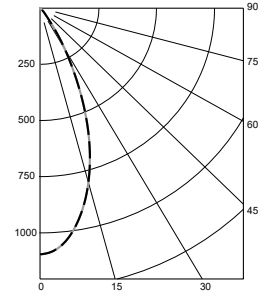
**Flood (FL)**  
Distribution, 35°  
LTL # 11919582.18  
Lumens: 611



**Candelas at Nadir**

Deg	Candela
0	1517
5	1431
15	911
25	358
35	63
45	15

**Wide Flood (WF)**  
Distribution, 45°  
LTL # 11919582.19  
Lumens: 579




**Candelas at Nadir**

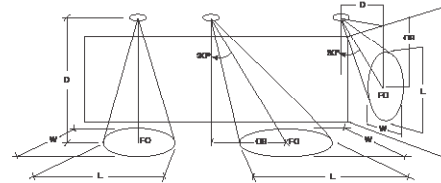
Deg	Candela
0	1096
5	1059
15	798
25	395
35	83
45	17

**Application Data:**

0° Aiming Angle  
Horizontal  
Footcandles



	D	FC	L	W
Very Narrow Flood	5.0'	142	1.6	1.6
	7.5'	64	2.5	2.5
	10.0'	36	3.3	3.3
	12.5'	23	3.9	3.9
Medium Flood	5.0'	99	2.1	2.1
	7.5'	44	3.2	3.2
	10.0'	25	4.1	4.1
	12.5'	16	5.2	5.2
Flood	5.0'	59	3.0	3.0
	7.5'	26	4.4	4.4
	10.0'	15	5.8	5.8
	12.5'	10	7.3	7.3
Wide Flood	5.0'	42	3.5	3.5
	7.5'	19	5.3	5.3
	10.0'	11	7.0	7.0
	12.5'	7	8.7	8.7



**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.

**PROJECT:**

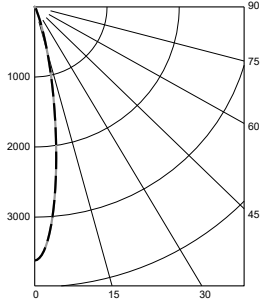
**TYPE:**

**Hornet HP Square Pinhole Adjustable:**

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

**15W LED, 3000K-95**

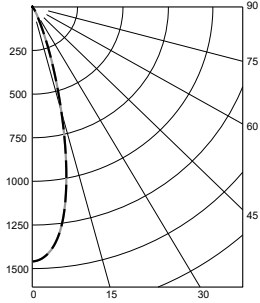
**Very Narrow Flood (VNF)**  
Distribution, 18°  
LTL #11919582.22  
Lumens: 457



**Candelas at Nadir**

Deg	Candela
0	3620
5	2876
15	595
25	60
35	22
45	3

**Flood (FL)**  
Distribution, 28°  
LTL # 11919582.23  
Lumens: 376




**Candelas at Nadir**

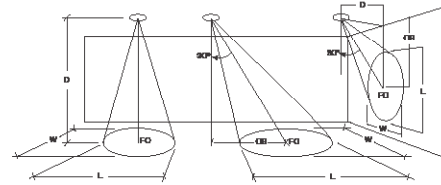
Deg	Candela
0	1460
5	1375
15	635
25	108
35	25
45	4

**Application Data:**

0° Aiming Angle  
Horizontal  
Footcandles



	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Very Narrow Flood	5.0'	139	1.5	1.5
	7.5'	63	2.4	2.4
	10.0'	36	3.1	3.1
	12.5'	23	3.8	3.8
Flood	5.0'	56	2.5	2.5
	7.5'	25	3.6	3.6
	10.0'	14	4.8	4.8
	12.5'	9	5.9	5.9



**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.

**PROJECT:**

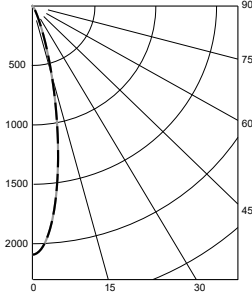
**TYPE:**

**Hornet HP Square Pinhole Adjustable Shower:**

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

**15W LED, 3000K-95**

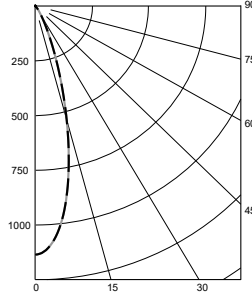
**Very Narrow Flood (VNF)**  
Distribution, 23°  
LTL #11919582.20  
Lumens: 428



**Candelas at Nadir**

Deg	Candela
0	2092
5	1830
15	641
25	115
35	26
45	7

**Flood (FL)**  
Distribution, 28°  
LTL # 11919582.21  
Lumens: 354

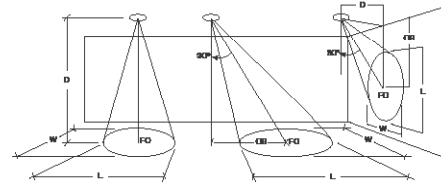


**Candelas at Nadir**

Deg	Candela
0	1135
5	1057
15	545
25	143
35	34
45	9

**Application Data:**

	0° Aiming Angle Horizontal Footcandles			
	D	FC	L	W
Very Narrow Flood	5.0'	81	2.0	2.0
	7.5'	36	2.9	2.9
	10.0'	21	3.9	3.9
	12.5'	13	4.9	4.9
Flood	5.0'	44	2.6	2.6
	7.5'	20	3.7	3.7
	10.0'	11	5.0	5.0
	12.5'	7	6.2	6.2



**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.

**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 ---**

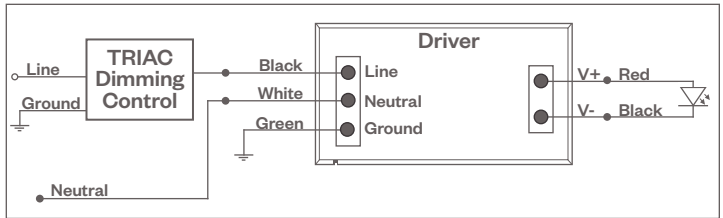
**TRIAC (Forward Phase) DIMMING (Standard)**

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 "Vareo"	
Lutron "Skylark"	

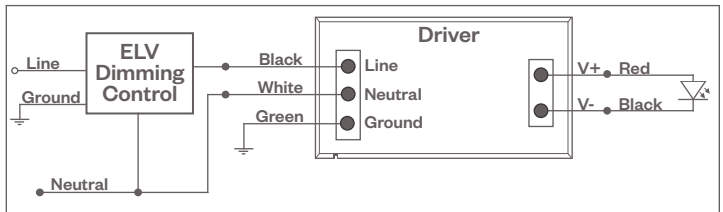
**ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)**

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 "Vareo"		
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.

**PROJECT:**

**TYPE:**

**DIMMING COMPATIBILITY:**

Amerlux<sup>®</sup> 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 ---**

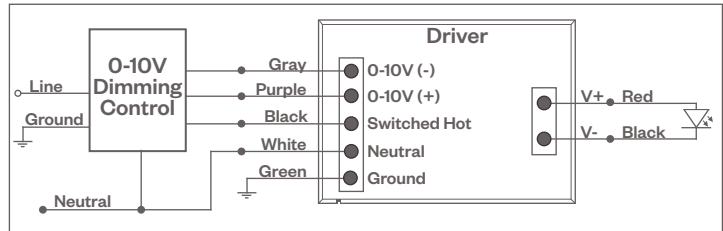
**0-10V DIMMING**

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" - DTVV with PP-120H Interface

Leviton Renoir II 0-10V

**Central System**

Lutron Grafik Eye with GRX-TV1 Interface

**LUTRON H-SERIES / ECOSYSTEM DIMMING**

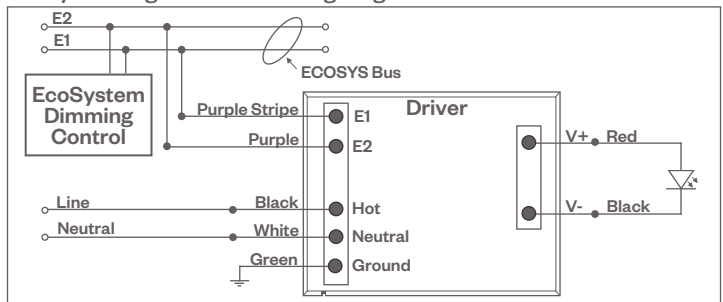
Integrates into Lutron EcoSystem building management

**Notes:**

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

**HILUME-H-ECO, HILUME-5-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

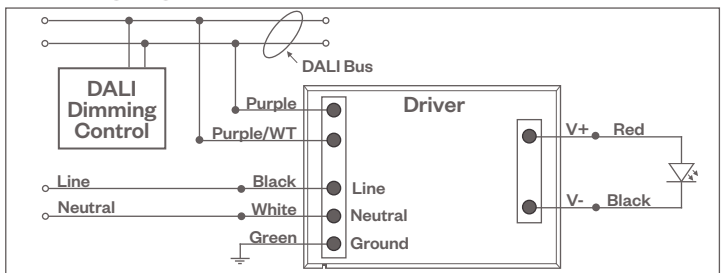
**DALI DIMMING**

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.

PROJECT:

TYPE:

## EMERGENCY DIMMING (-EM OPTION)

### Wiring Diagram

