

Hornet® HP

3.5" Round Downlights

Dim-To-Warm



Downlight



Downlight (Millwork version shown)



Adjustable (Trimless version shown)

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

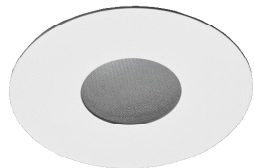
- Type: Recessed Round Downlight
- Wattage: 15W
- Lumen Output: 699 lm max (RA trim, VNF optic)
- Color Temp: 3000K to 1800K
- CRI: 95 typ.
- Dimming: TRIAC & ELV (120/277VAC) - 5% Dim
Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black (120/277VAC)
0-10V (120/277VAC) - 1% Dim
DALI (120/277VAC) - 1% Dim

PROJECT:

TYPE:



Pinhole Adjustable



Pinhole Adjustable Shower



Pinhole Adjustable Slot

Fixture Type

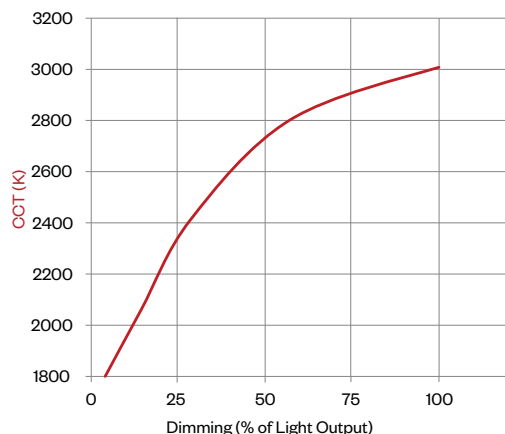
New Construction	Remodeler	Trim	Trimless
Yes	Yes	Yes	Yes

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

3.5" Round Downlights, Dim-To-Warm



PROJECT:

TYPE:

Housing/Frame Ordering Information

			15		
1	2	3	4	5	6
1 <u>Model</u> For New Construction HDL-HP-R-NC-DTW-A17[†] (New Construction) HDL-HP-R-CP-DTW-A17[†] (Chicago Plenum housing) HDL-HP-R-IC-DTW-A17^{†*} (Insulated Ceiling/air tight) For Existing Ceilings HDL-HP-R-REM-DTW-A17[†] (Remodeler)	2 <u>Style</u> T - trimmed TL - trimless MWK^R - millwork (for 1/2" - 11/16" ceiling thickness) MWK1^R - millwork (for 3/4" - 1-1/2" ceiling thickness) MWK2^R - millwork (for 1-1/2" - 2" ceiling thickness) ^R Not available for use with Remodeler model	3 <u>Wattage</u> 15	4 <u>Voltage</u> 120 277 120/277 (for use with IC housing only)	5 <u>Driver</u> LE/TE - TRIAC/ELV dimming HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/ Fade-to-Black O-10V - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim	6 <u>Options/Accessories</u> 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)

Trim Ordering Information

			309												
1	2	3	4	5	6										
1 <u>Model</u> HDL-HP-RD-DTW-A17[†] (downlight) HDL-HP-RA-DTW-A17[†] (adjustable) HDL-HP-RPA-DTW-A17[†] (pinhole adjustable) HDL-HP-RPAS-DTW-A17[†] (pinhole adjustable slot) HDL-HP-RPASHW-DTW-A17[†] (shower, not available in trimless)	2 <u>Style</u> T - trimmed TL - trimless (not for use with RPASHW trim) MWK - millwork (not available for use with RPASHW trim)	3 <u>Finish</u> <u>RD/RA Trims:</u> Trimmed 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 Trimless/Millwork MB - matte black MW - matte white SLV - matte silver Finish - RPA/RPAS/RPASHW Trims (T/TL/MWK): MB - matte black MW - matte white SLV - matte silver PC - polished chrome (not available for use with MWK) BN - brushed nickel (not available for use with MWK)	4 <u>Beam Spreads</u> <table border="0"> <tr> <td>RD/RA</td> <td>RPA/RPAS/RPASHW</td> </tr> <tr> <td>VNF</td> <td>VNF</td> </tr> <tr> <td>MFL</td> <td>FL</td> </tr> <tr> <td>FL</td> <td></td> </tr> <tr> <td>WF</td> <td></td> </tr> </table> VNF - very narrow flood, MFL - medium flood, FL - flood, WF - wide flood	RD/RA	RPA/RPAS/RPASHW	VNF	VNF	MFL	FL	FL		WF		5 <u>Color Temp</u> 95 CRI 309 - 3000K-95	6 <u>Options/Accessories</u> HEX - hexcell louver (not available for use with RPASHW trim) SOL - solite beam softening lens (comes standard with RPASHW trim)
RD/RA	RPA/RPAS/RPASHW														
VNF	VNF														
MFL	FL														
FL															
WF															

[†] The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

Hornet® HP

3.5" Round 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. (± 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)

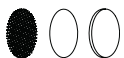
Warranty

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® HP

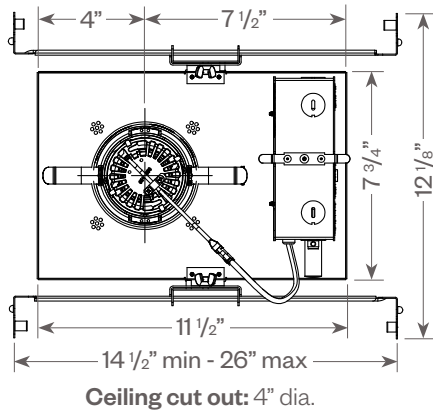
3.5" Round Downlights, Dim-To-Warm



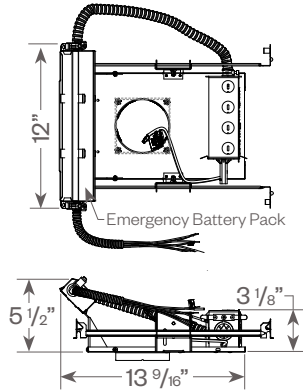
PROJECT:

TYPE:

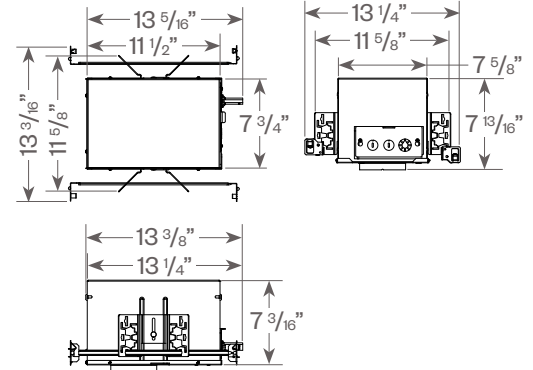
Hornet HP Downlight: Round



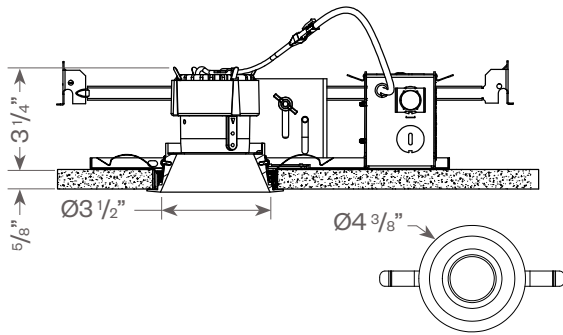
Frame with Emergency Battery Pack



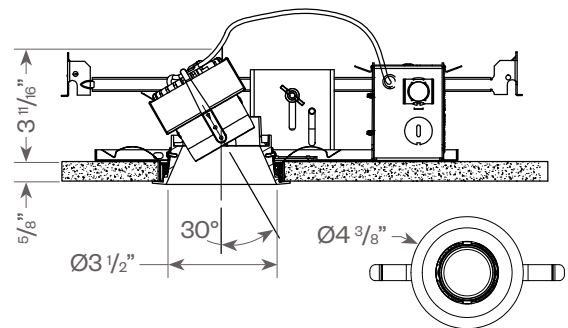
Optional CP or IC/AT housing



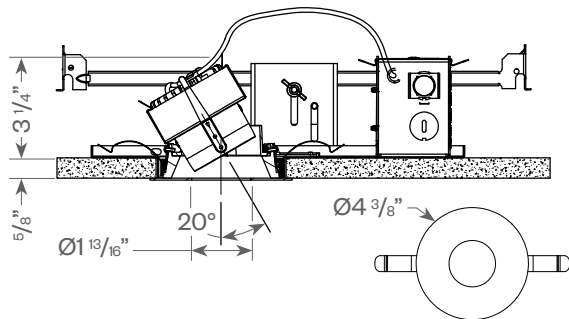
Downlight



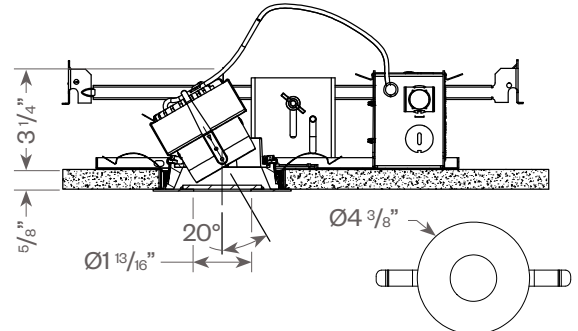
Adjustable



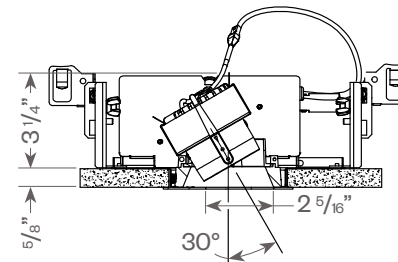
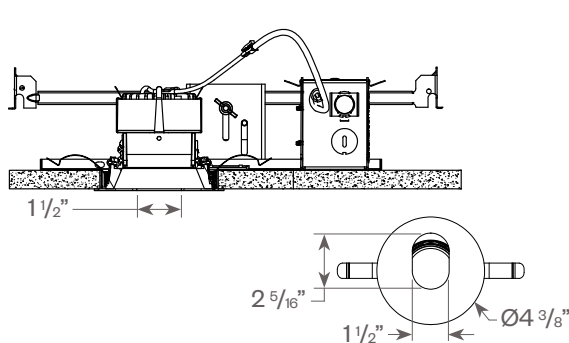
Pinhole Adjustable



Pinhole Adjustable Shower



Pinhole Adjustable Slot



Hornet[®] HP

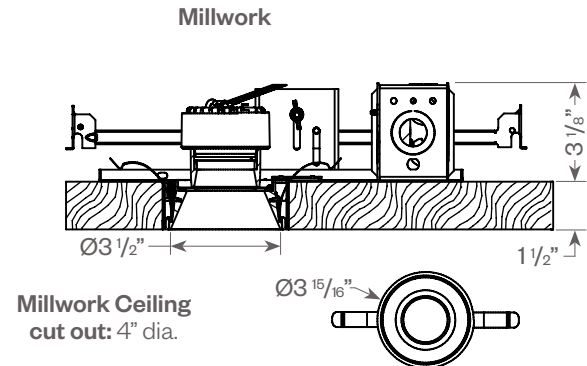
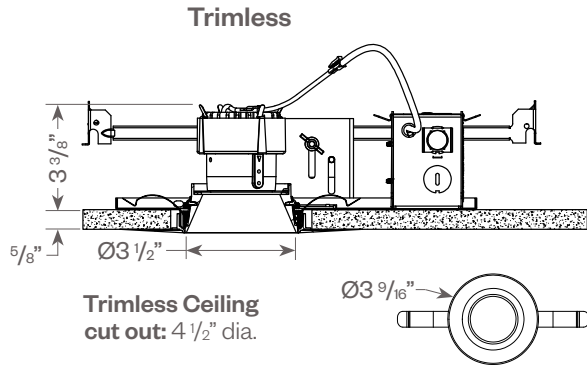
3.5" Round Downlights, Dim-To-Warm



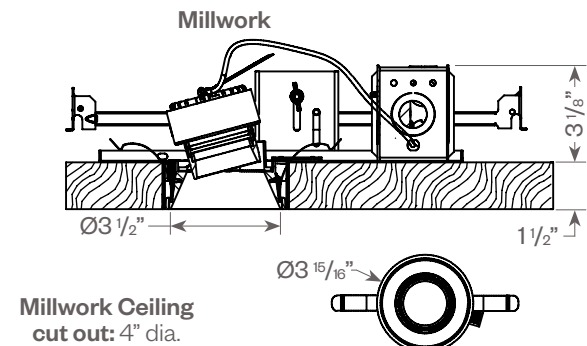
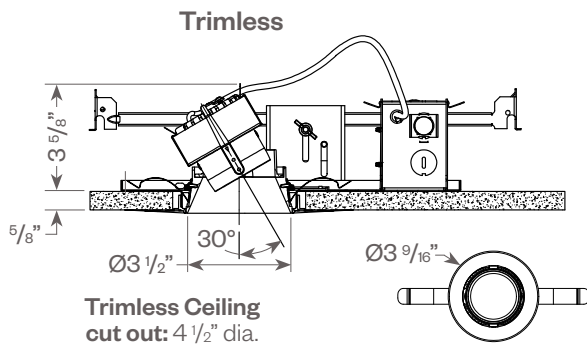
PROJECT:

TYPE:

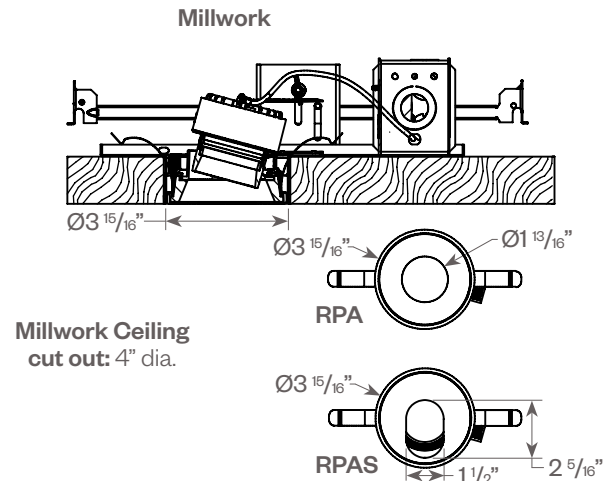
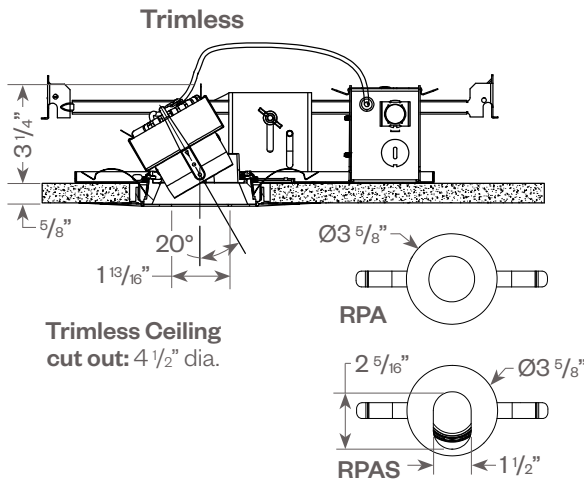
Hornet HP Round Downlight:



Hornet HP Round Adjustable:

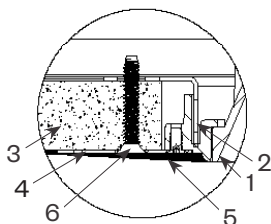


Hornet HP Round Pinhole Adjustable/Pinhole Adjustable Slot:



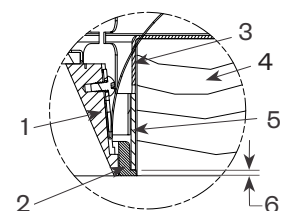
Plaster Frame Installation Detail (for trimless fixture only)

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® HP

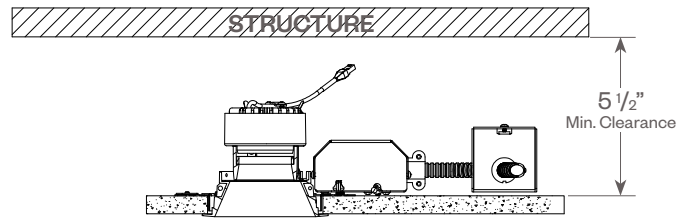
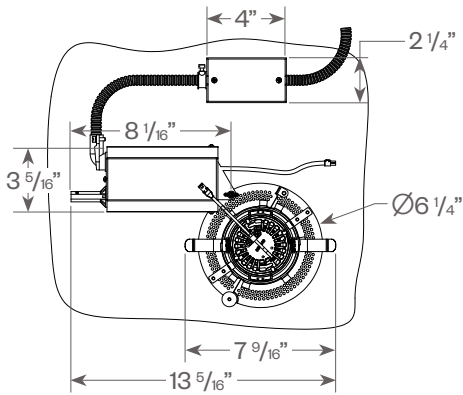
3.5" Round Downlights, Dim-To-Warm



PROJECT:

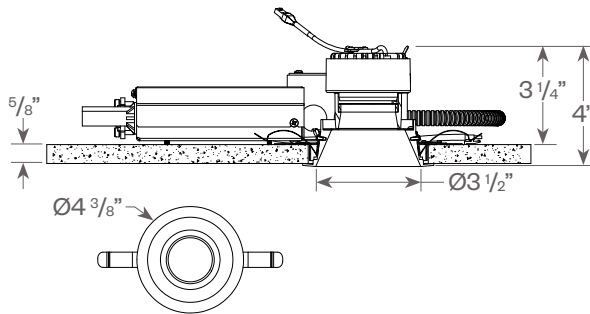
TYPE:

Hornet HP Downlight: Remodeler

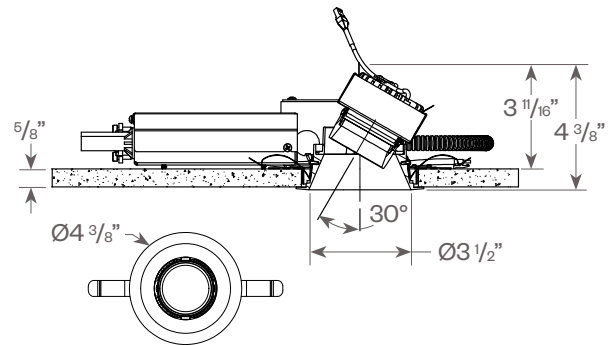


Ceiling cut out: 4" dia.

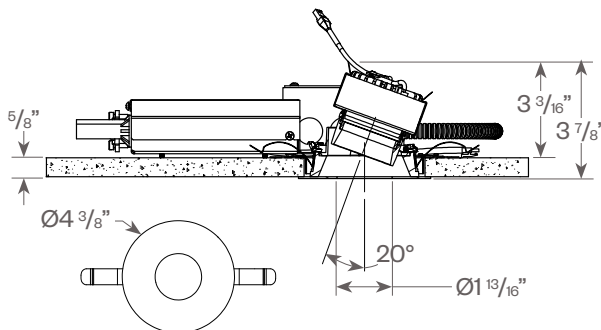
Downlight



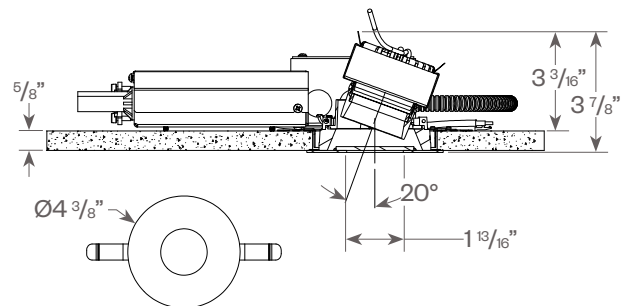
Adjustable



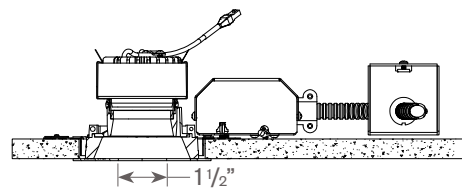
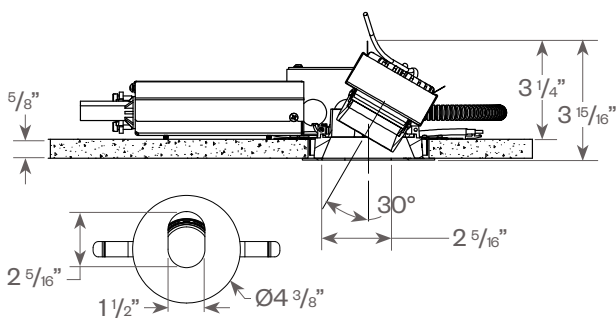
Pinhole Adjustable



Pinhole Adjustable Shower



Pinhole Adjustable Slot



Hornet[®] HP

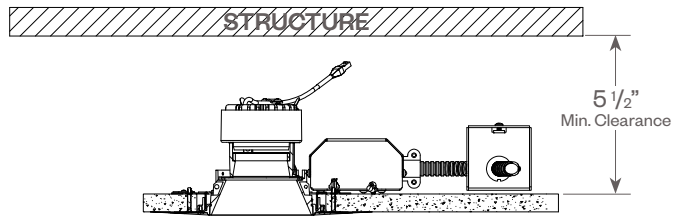
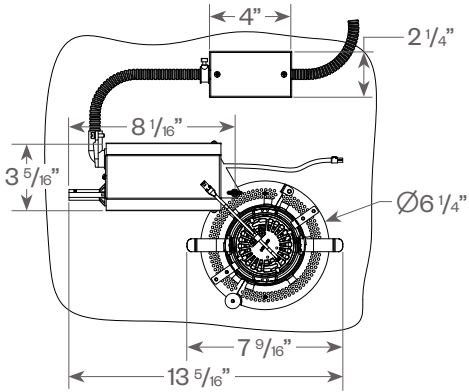
3.5" Round Downlights, Dim-To-Warm



PROJECT:

TYPE:

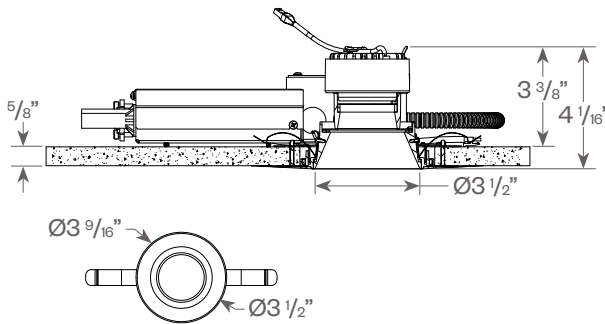
Hornet HP Downlight: Remodeler Trimless



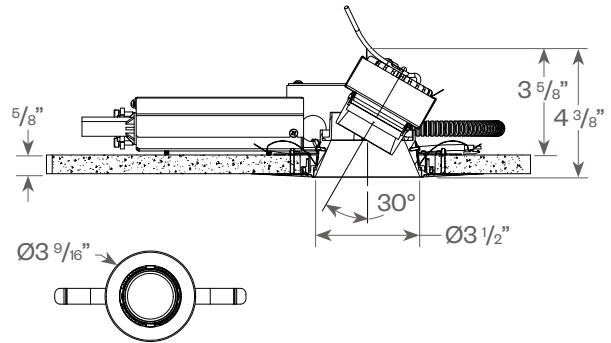
Trimless Ceiling cut out: 4 1/2" dia.

Millwork Ceiling cut out: 4" dia.

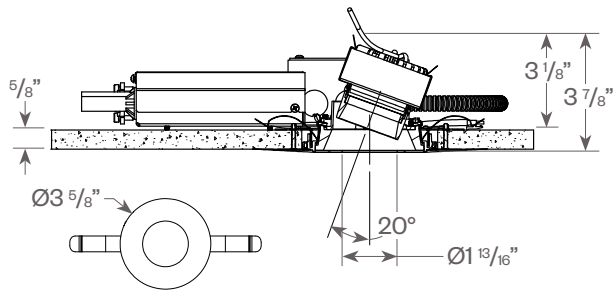
Downlight



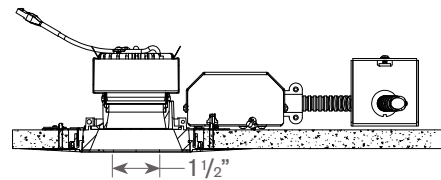
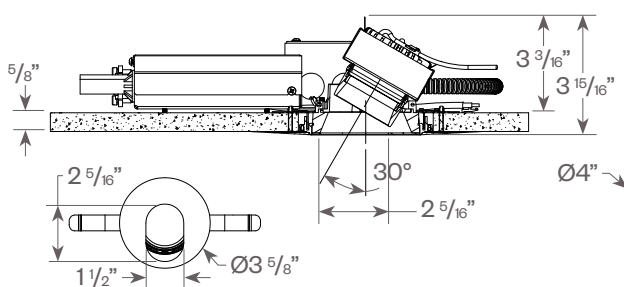
Adjustable



Pinhole Adjustable



Pinhole Adjustable Slot



Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



PROJECT:

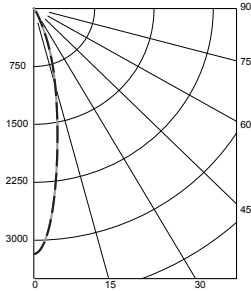
TYPE:

Hornet HP Round Downlight:

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

15W LED, 3000K-95

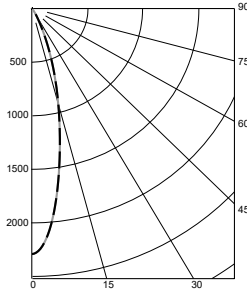
Very Narrow Flood (VNF)
Distribution, 18°
LTL #11919582.12
Lumens: 672



Candelas at Nadir

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

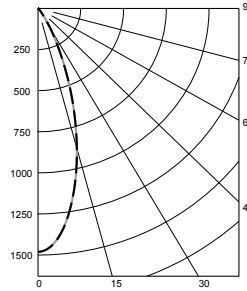
Medium Flood (MFL)
Distribution, 25°
LTL #11919582.13
Lumens: 609



Candelas at Nadir

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

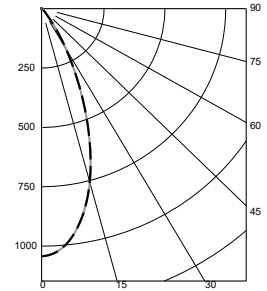
Flood (FL)
Distribution, 35°
LTL # 11919582.14
Lumens: 582



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

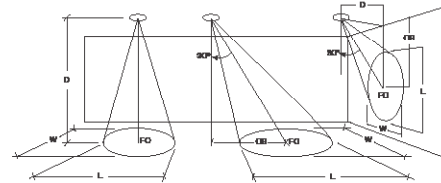


Candelas at Nadir

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.

Hornet® HP

3.5" Round Downlights, Dim-To-Warm



PROJECT:

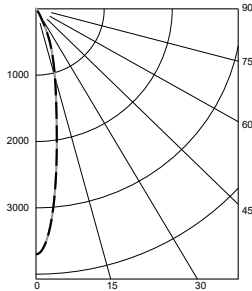
TYPE:

Hornet HP Round Adjustable:

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

15W LED, 3000K-95

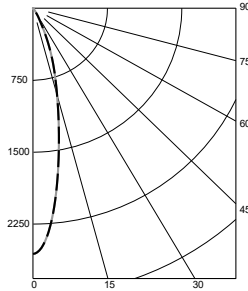
Very Narrow Flood (VNF)
Distribution, 18°
LTL #11919582.16
Lumens: 699



Candelas at Nadir

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

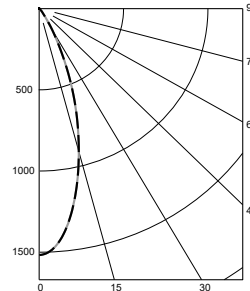
Medium Flood (MFL)
Distribution, 25°
LTL #11919582.17
Lumens: 652



Candelas at Nadir

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

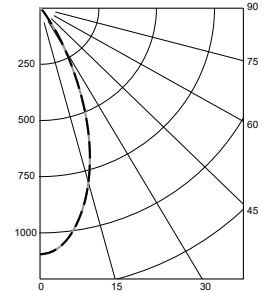
Flood (FL)
Distribution, 35°
LTL # 11919582.18
Lumens: 611



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

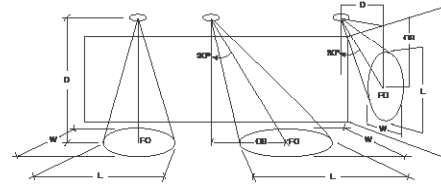


Candelas at Nadir

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.

Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



PROJECT:

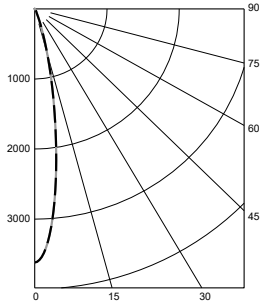
TYPE:

Hornet HP Round Pinhole Adjustable:

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

15W LED, 3000K-95

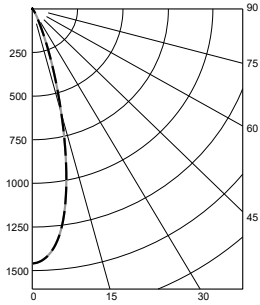
Very Narrow Flood (VNF)
Distribution, 18°
LTL #11919582.22
Lumens: 457



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

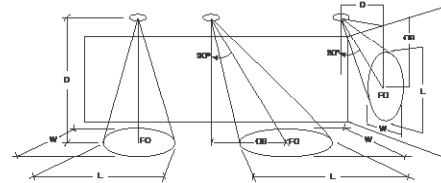


Candelas at Nadir

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

Application Data:

		0° Aiming Angle Horizontal Footcandles			
		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.

Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



PROJECT:

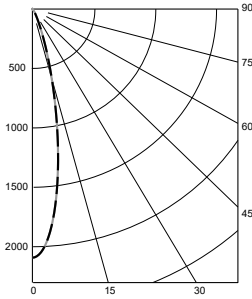
TYPE:

Hornet HP Round Pinhole Adjustable Shower:

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

15W LED, 3000K-95

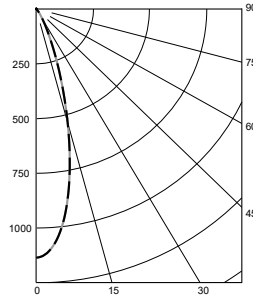
Very Narrow Flood (VNF)
Distribution, 23°
LTL # 11919582.20
Lumens: 428



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

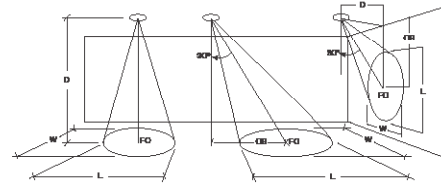


Candelas at Nadir

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.

Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



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 ---

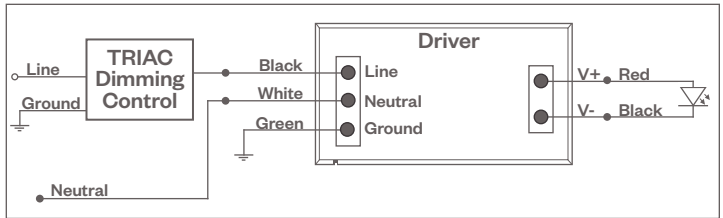
TRIAC (Forward Phase) DIMMING (Standard)

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"	

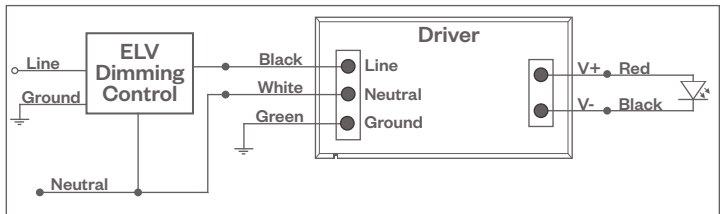
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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

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 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.

Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



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 ---

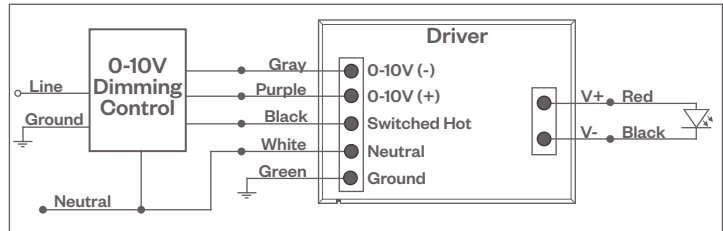
0-10V DIMMING

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-TV1 Interface

LUTRON LDE1 DIMMING

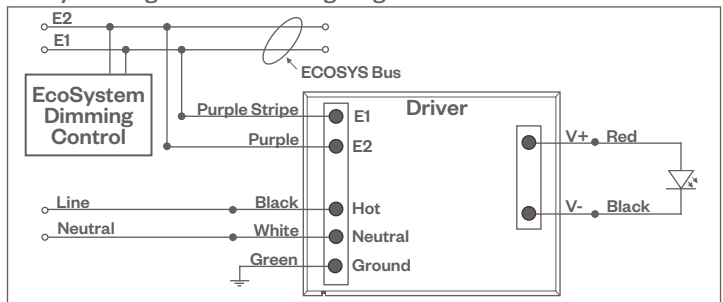
Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Lutron LDE1 (HILUME-H-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

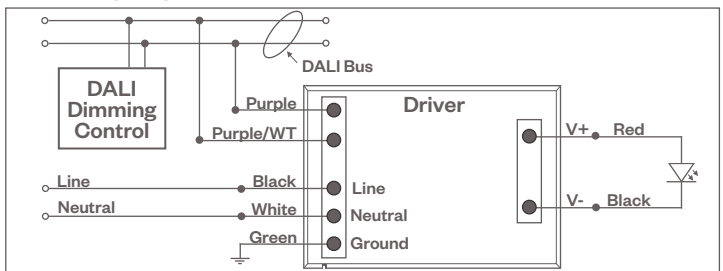
DALI DIMMING

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.

Hornet[®] HP

3.5" Round Downlights, Dim-To-Warm



PROJECT:

TYPE:

EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram

