

Hornet® HP

Round Lensed Downlight/ Wall Wash

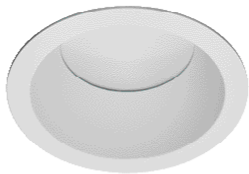


Features

Hornet Lensed Downlights are the perfect choice for all general lighting needs. Available in Round or Square apertures, these fixtures meet the needs of commercial and hospitality markets. Optional Solite lensing provides whisper quiet aesthetics. Also available in knife-edge trimless, remodeler or millwork. Complementing Hornet Lens Wall Wash fixture available.

Product Overview

- Type: Recessed Round Lensed Downlight/Wall Wash
- Wattage: 9, 12, 16, 23, 27, 30
- Color Temp: 2200K, 2700K, 3000K, 3500K, 4000K
- ORI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite & 3K Class A available
- 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



Downlight

PROJECT:

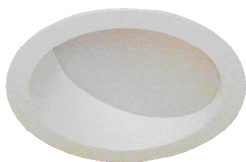
TYPE:



Trimless version



Millwork version



Wall Wash

Performance Chart

Watts	HDL-HP-RLD				HDL-HP-RLW		
	Delivered Lumens	LPW	CBCP	Color Temp	Delivered Lumens	LPW	Color Temp
9	796	88.5	2147	3000K-83	771	85.6	3000K-83
12	1062	88.5	2862	3000K-83	1028	85.6	3000K-83
16	1409	88	3798	3000K-83	1363	85.2	3000K-83
23	2042	90.5	5504	3000K-83	1,976	87.9	3000K-83
27	2389	88.5	6440	3000K-83	2371	87.8	3000K-83
30	2654	88.5	7155	3000K-83	2569	85.6	3000K-83

Data is based on 3000K-83 IES files available on website

Data is based on 30SOL optic.

All wattage and LPW includes 2W thermal protector

Electrical Data

	9W		12W		16W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	9.8	0.08	11.9	0.10	15.2	0.13
277V	9.8	0.04	11.9	0.04	15.2	0.06
	23W		27W		30W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	22.8	0.19	27.3	0.23	32	0.27
277V	22.8	0.08	27.3	0.10	32	0.12

Electronic constant current LED driver

Includes thermal protector, 2W power consumption



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Round Lensed Downlight/Wall Wash



PROJECT:

TYPE:

Housing/Frame Ordering Information

1	2	3	4	5	6
<p>1 <u>Model</u> For New Construction HDL-HP-R-NC-A17[†] (New Construction) HDL-HP-R-CP-A17[†] (Chicago Plenum (CCEA) housing) HDL-HP-R-IC-A17^{†T24} (Insulated Ceiling/air tight, 16W max)</p> <p>For Existing Ceilings HDL-HP-R-REM-A17[†] (Remodeler)</p>	<p>2 <u>Style</u> T - trimmed TL - trimless MWK^{R†} - millwork (for 1/2" - 11/16" ceiling thickness) ^R Not available for use with Remodeler model [†] Consult factory for use in ceilings thicker than 11/16"</p>	<p>3 <u>Wattage</u> 9 12 16^{T24} 23^{††} 27^{††} 30^{††} ^{††} Not available for use with IC housing</p>	<p>4 <u>Voltage</u> 120 277 120/277 (for use with IC housing only)</p>	<p>5 <u>Driver</u> (for non-dimming, select LE/TE option) LE/TE^{T24} - TRIAC/ELV dimming HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/ Fade-to-Black 0-10V^{T24} - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim</p>	<p>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)</p>

Trim Ordering Information

1	2	3	4	5	6
<p>1 <u>Model</u> HDL-HP-RLD-A17[†] (lensed downlight) HDL-HP-RLW-A17[†] (lensed wall wash)</p>	<p>2 <u>Style</u> T - trimmed TL - trimless MWK - millwork</p>	<p>3 <u>Finish</u> <u>Trimmed</u> 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</p> <p><u>Trimless/Millwork</u> MB - matte black MW - matte white SLV - matte silver</p>	<p>4 <u>Beam Spreads</u> (not required with RLW version) 30SOL - 30° beam with solite lens 50SOL - 50° beam with solite lens 65SOL - 65° beam with solite lens 75SAT - 75° beam with satin ice lens</p>	<p>5 <u>Color Temp</u> 83 CRI 90+ CRI^{T24} 27 - 2700K-83 229 - 2200K-90+ CRISP* - CrispWhite 30 - 3000K-83 279 - 2700K-90+ 3CLA* - 3K Class A 35 - 3500K-83 309 - 3000K-90+ 40 - 4000K-83 359 - 3500K-90+ 409 - 4000K-90+ * Not available for 27W & 30W</p>	<p>6 <u>Options/Accessories</u> WET - wet location (only available for use with trimmed style)</p>

^{T24} JA8/Title 24 Compliant

[†] 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

Round Lensed Downlight/Wall Wash



PROJECT:

TYPE:

Specifications

Application

Retail and commercial ambient or wall wash 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

Lens Options (for RLD version):

- Satin Ice lens for maximum source concealment and wide distribution with a visually "hotter" aperture.
- Solite lens for maximum efficacy and a visually quieter aperture. 30°, 50° and 65° beam spread options. Visually best with SLV reflector finish.

Beam spreads (for RLD version):

- 30SOL - 30° beam with solite lens
- 50SOL - 50° beam with solite lens
- 65SOL - 65° beam with solite lens
- 75SAT - 75° beam with satin ice lens

Wall Wash:

Engineered nano technology lens provides high transmission while concealing LED image

LED

Color Temp Options:

2200K, 2700K, 3000K, 3500K, 4000K

CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)

90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)

CrispWhite* and Class A** 3000K LEDs available

R9 Values: 11 (83 CRI), 55 (92 CRI)

Binning: 3 MacAdam (SDCM)

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

**CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.*

***Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.*

Electrical

Wattage: 9, 12, 16, 23, 27, 30

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/Trailing Edge, ELV, reverse phase

0-10V, Lutron and DALI systems available

See pages 10-12 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 (1" max for RLW trims) standard

Trimless Fixture:

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. 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 (optional, 16W only)

JA8/Title 24 Compliant (see ordering page for options that apply)

Damp location

Wet location option

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/AT versions)

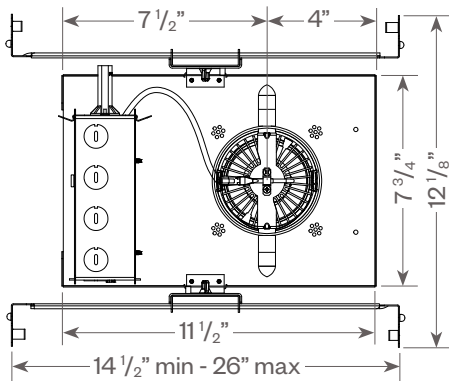
Hornet® HP

Round Lensed Downlight/Wall Wash

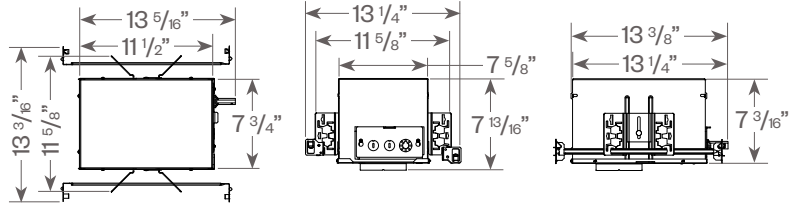


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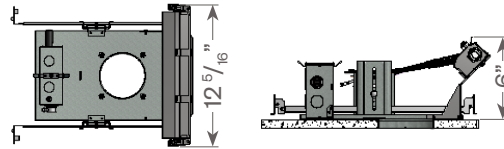
TYPE:



Optional CP or IC/AT housing

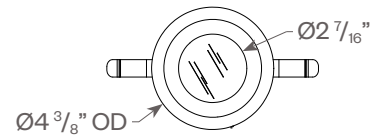
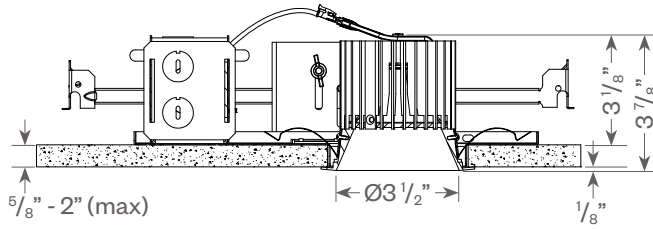


Emergency Battery Pack (EM) option



Hornet HP Round Lensed Downlight:

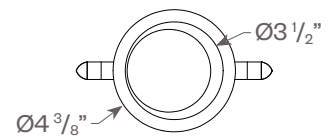
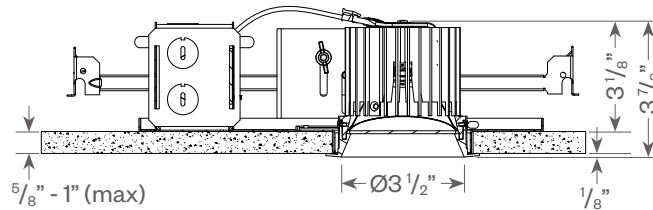
Trimmed



Ceiling cut out: 4" dia.

Hornet HP Round Lensed Wall Wash:

Trimmed



Ceiling cut out: 4" dia.

Hornet® HP

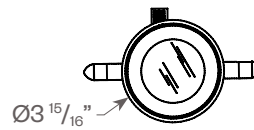
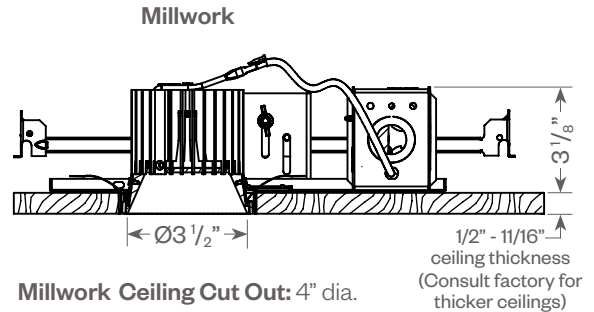
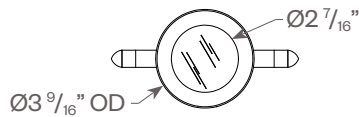
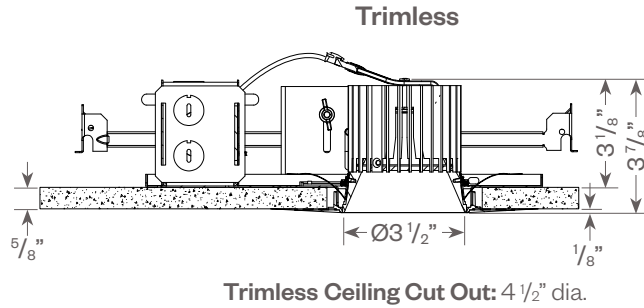
Round Lensed Downlight/Wall Wash



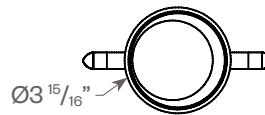
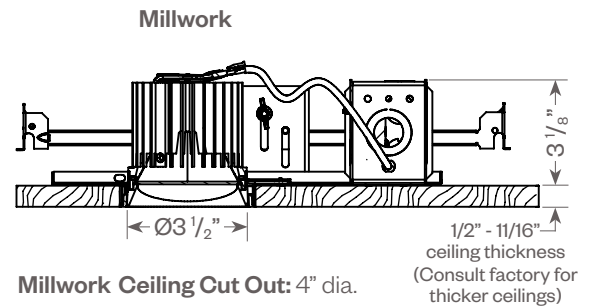
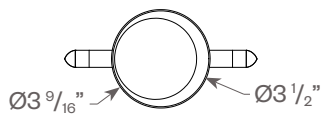
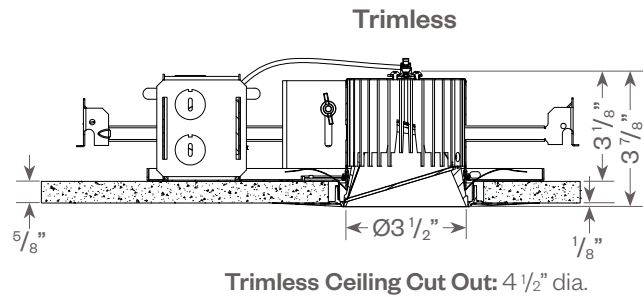
PROJECT:

TYPE:

Hornet HP Round Lensed Downlight:

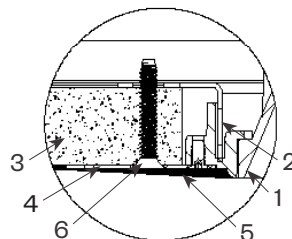


Hornet HP Round Lensed Wallwash:



Plaster Frame Installation Detail (for trimless fixture only)

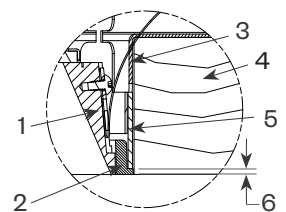
1. Reflector Trim
2. Aperture plate
3. Ceiling 5/8"
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



New Construction

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



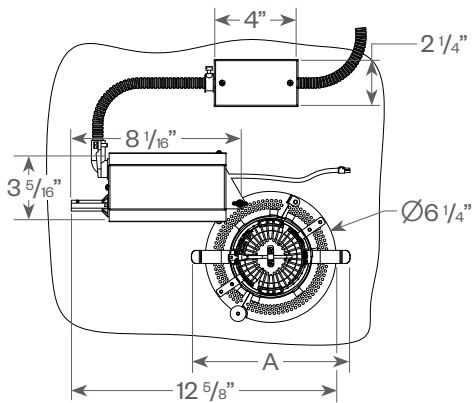
Hornet[®] HP

Round Lensed Downlight/Wall Wash



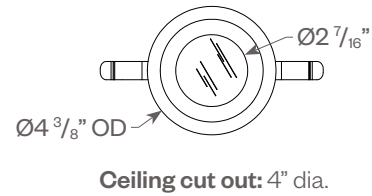
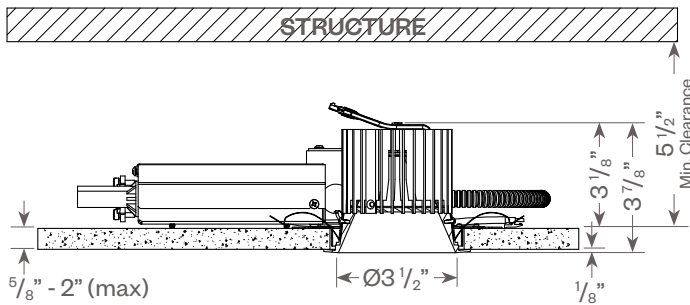
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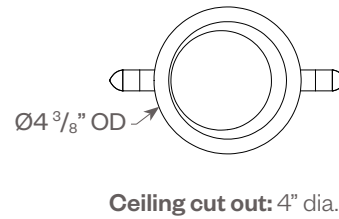
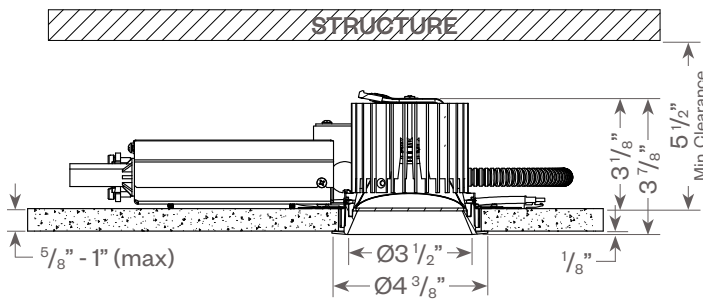


	RLD-REM	RLW-REM
A	7 ⁹ / ₁₆ "	7"

Hornet HP Round Lensed Downlight Remodeler:

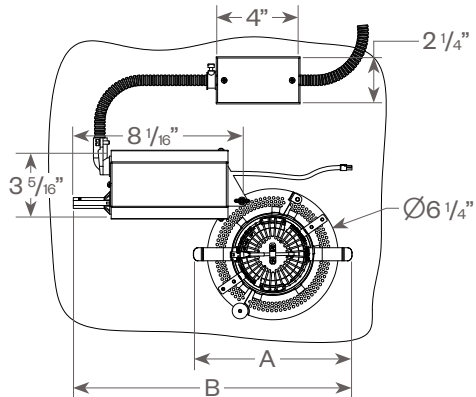


Hornet HP Round Lensed Wall Wash Remodeler:



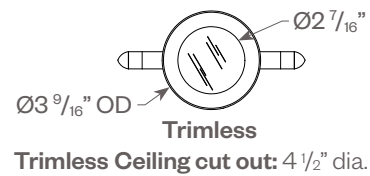
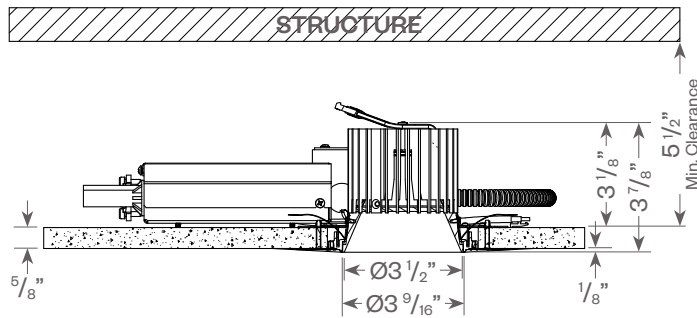
PROJECT:

TYPE:

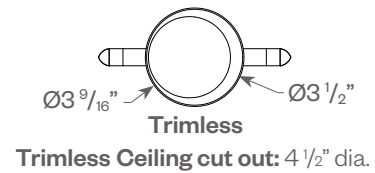
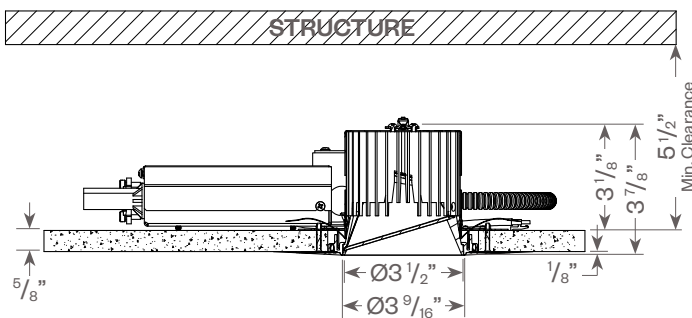


	RLD-REM-TL	RLW-REM-TL
A	6 13/16"	7"
B	12 15/16"	13 5/16"

Hornet HP Round Lensed Downlight Remodeler Trimless:

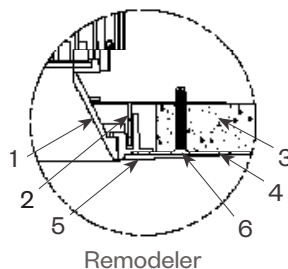


Hornet HP Round Lensed Wall Wash Remodeler Trimless:



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



Hornet® HP

Round Lensed Downlight/Wall Wash



PROJECT:

TYPE:

Hornet HP Round Lensed Downlight:

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

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

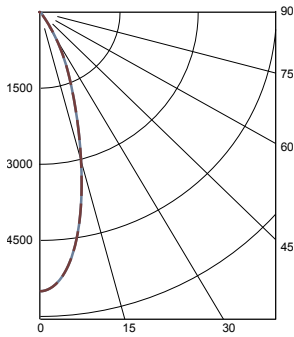
Wattage:	9W	12W	16W	23W	27W	30W
Factor:	0.39	0.52	0.69	1.0	1.2	1.3

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

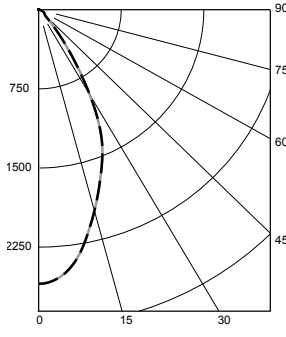
30° Solite Lens
LTL # 13408034.01
Lumens: 2042 lm; 90.5 lm/W



Candelas at Nadir

Deg	Candela
0	5504
5	5162
15	2877
25	1113
35	210
45	59

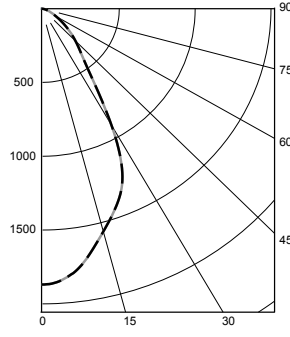
50° Solite Lens
LTL # 13408034.02
Lumens: 1923 lm; 85.2 lm/W



Candelas at Nadir

Deg	Candela
0	2597
5	2523
15	1960
25	1347
35	493
45	101

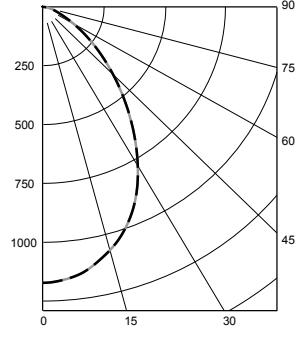
65° Solite Lens
LTL # 13408034.03
Lumens: 2027 lm; 89.9 lm/W



Candelas at Nadir

Deg	Candela
0	1869
5	1829
15	1554
25	1228
35	551
45	307

75° Satin Ice Lens
LTL # 13408034.04
Lumens: 1905 lm; 84.8 lm/W



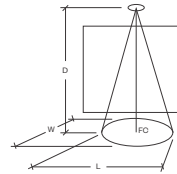
Candelas at Nadir

Deg	Candela
0	1173
5	1160
15	1069
25	900
35	650
45	410

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).
- CB=Distance across or down to center beam location.



30° Solite Lens
0° Aiming Angle
Horizontal Footcandles

D	FC	L	W
5.0'	221	2.7	2.7
7.5'	98	3.9	3.9
10.0'	55	5.2	5.2
12.5'	36	6.5	6.5

50° Solite Lens
0° Aiming Angle
Horizontal Footcandles

D	FC	L	W
5.0'	104	3.8	3.8
7.5'	47	5.8	5.8
10.0'	26	7.8	7.8
12.5'	17	9.7	9.7

65° Solite Lens
0° Aiming Angle
Horizontal Footcandles

D	FC	L	W
5.0'	75	4.5	4.4
7.5'	34	6.8	6.8
10.0'	19	9.3	9.3
12.5'	13	11.8	11.8

75° Satin Ice Lens
0° Aiming Angle
Horizontal Footcandles

D	FC	L	W
5.0'	47	5.2	5.2
7.5'	21	7.9	7.9
10.0'	12	10.7	10.7
12.5'	8	14.0	14.0

Hornet[®] HP

Round Lensed Downlight/Wall Wash



PROJECT:

TYPE:

Hornet HP Round Lensed Wall Wash:

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

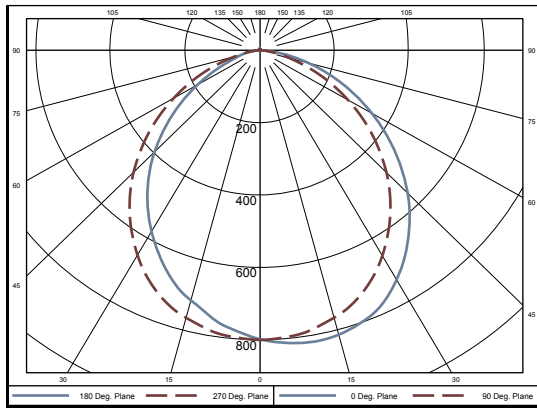
MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

Wattage:	9W	12W	16W	23W	27W	30W
Factor:	0.39	0.52	0.69	1.0	1.2	1.3

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 3000K-83
Wall Wash
LTL # 13408034.05
Lumens: 1976 lm



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	992	50.2
0-60	1665	84.3
0-90	1976	100.0
90-180	0	0.0

Luminaire Efficacy: 87.9 Lm/W

Application Data: Footcandles on Wall

Footcandles are average and rounded off.
Data for multiple units are based on a minimum of five units.

1.5 Feet from Wall

		← 1.5' →		← 1.5' →		
Distance from ceiling	0.5'	91	95	96	95	91
	1.5'	146	155	159	156	147
	2.5'	104	113	115	113	104
	3.5'	63	70	72	70	64
	4.5'	40	43	45	44	40
	5.5'	27	29	30	30	27
	6.5'	20	21	22	21	20
	7.5'	16	16	17	17	16

1.5 Feet from Wall

		← 2' →		← 2' →				
Distance from ceiling	0.5'	37	40	37	40	37	40	36
	1.5'	72	77	75	78	74	77	72
	2.5'	69	73	74	75	74	73	69
	3.5'	48	52	54	54	54	52	49
	4.5'	33	36	37	38	37	36	33
	5.5'	23	26	27	27	27	26	24
	6.5'	17	19	20	20	20	19	18
	7.5'	14	15	16	16	16	15	14

2 Feet from Wall

		← 2' →		← 2' →				
Distance from ceiling	0.5'	39	44	42	44	43	44	41
	1.5'	83	90	90	92	90	90	83
	2.5'	77	83	85	87	86	84	77
	3.5'	55	59	62	63	62	60	55
	4.5'	38	41	43	44	43	42	38
	5.5'	27	30	31	31	31	30	28
	6.5'	21	22	23	23	23	22	21
	7.5'	16	17	18	18	18	17	16

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 ---

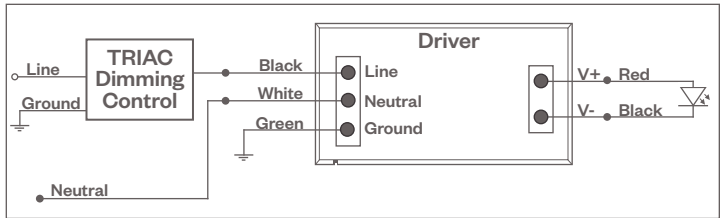
TRIAC (Forward Phase) DIMMING (Standard)

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"	

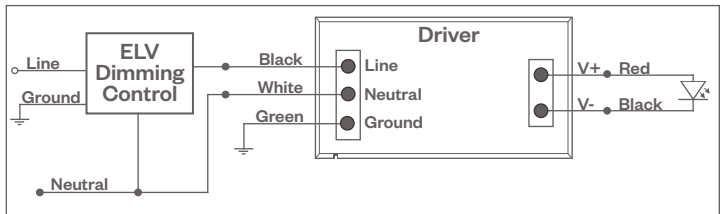
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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

Round Lensed Downlight/Wall Wash



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 ---

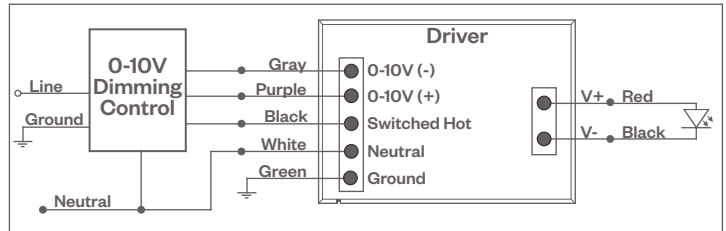
0-10V DIMMING

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

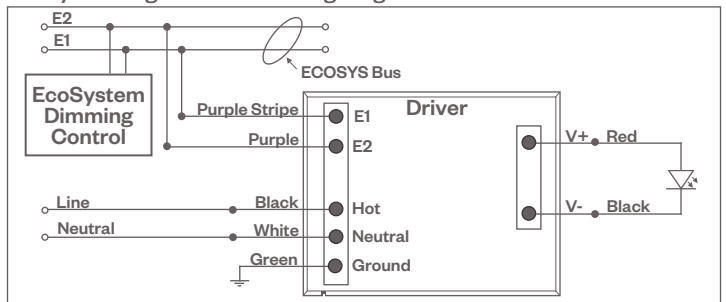
Integrates into Lutron EcoSystem building management

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

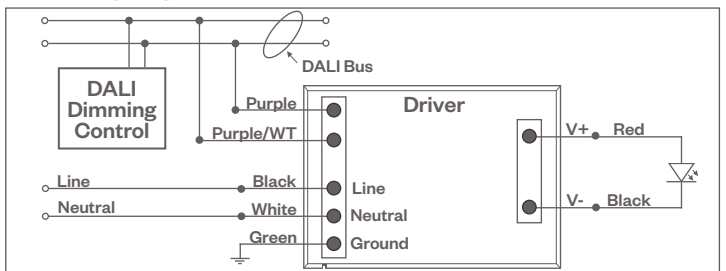
DALI DIMMING

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.

PROJECT:

TYPE:

EMERGENCY DIMMING (-EM OPTION)

Wiring Diagram

