

Hornet® HP

Pendant/Surface Multiples



2 Light Pendant Straight Multiple

Features

Hornet High Power (HP) Pendant Multiples perform beautifully, punching through higher ambient light with strong output making them perfect for retail applications. Designed for use in open or closed ceiling applications as an alternate to Pendant Track, Hornet HP Pendant Multiples are ideal for delivering great performance, energy efficiency, and maximum control over where and how you want to place light. And they switch from recessed to semi-recessed to meet any aiming requirement.

Product Overview

Type:	Recessed Multiple, Accent & Display
Wattage:	11, 16, 18
Lumen Output:	1,640 max; 91.1 Lm/W (spot optic)
CBCP:	13,119 max (spot optic)
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K, CRISP
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K) CrispWhite (16W max) & 3K Class A available
Dimming:	TRIAC & ELV (120/277VAC) - 5% Dim Lutron Hi-lume® H Series/EcoSystem - 1% dim with soft on, fade to black, 120/277VAC 0-10V (120/277VAC) - 1% Dim DALI (120/277VAC) - 1% Dim

PROJECT:

PRODUCT DISCONTINUED



3 Light Pendant Straight Multiple

Fixture Summary *(see following pages for more information)*

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
11	1030	93.7	8,243	3000K-83
16	1,451	90.7	11,610	3000K-83
18	1,640	91.1	13,119	3000K-83

*Data is based on 3000K-83, 120V IES files available on website
Data is "per head" and based on Spot optic
See pg 10 for other beam spreads*



3 Light Pendant Curved Multiple



PROJECT:

TYPE:

Ordering Information



- 1** Model
HHP-PM (pendant straight multiple)
HHP-PCM (pendant curved multiple)

- 2** # of Heads

Straight	Curved
1	2
2	3
3	
4	

- 3** Mounting
ASW10 - aircraft cable through ceiling tile or gyp board, white, 10'
ASW20 - aircraft cable through ceiling tile or gyp board, white, 20'
ASB10 - aircraft cable through ceiling tile or gyp board, black, 10'
ASB20 - aircraft cable through ceiling tile or gyp board, black, 20'
ASW10T - aircraft cable over ceiling tee, white, 10'
ASW20T - aircraft cable over ceiling tee, white, 20'
ASB10T - aircraft cable over ceiling tee, black, 10'
ASB20T - aircraft cable over ceiling tee, black, 20'
RSW4* - rigid stem, white, 4' (field cuttable)
RSW8* - rigid stem, white, 8' (field cuttable)
RSB4* - rigid stem, black, 4' (field cuttable)
RSB8* - rigid stem, black, 8' (field cuttable)
SM^o - surface mount
CDSM^o - conduit surface mount
**For custom length, consult factory*
^oNot available for curved multiples

- 4** Circuiting
1 - single circuit
2 - dual circuit (middle head(s) on secondary circuit)

- 5** Wattage
11
16
18

- 6** Housing Finish
WT - white texture
BT - black texture
ST - silver texture
WT/MB - white texture exterior/matte black interior
ST/MB - silver texture exterior/matte black interior

- 7** Voltage
120-277

- 8** Head Finish
WT - white texture
BT - black texture
ST - silver texture

- 9** Beam Spreads (see additional details below)

<u>1LT</u>	<u>2LT</u>	<u>3LT</u>	<u>4LT</u>	
SP	SP	SP	SP	(spot 15°)
NF	NF	NF	NF	(narrow flood 22°)
MFL	MFL	MFL	MFL	(medium flood 25°)
FL	FL	FL	FL	(flood 28°)
WF	WF	WF	WF	(wide flood 40°)
VWF	VWF	VWF	VWF	(very wide flood 60°)
LS	LS	LS	LS	(linear spread lens 60°x10°)

- 10** Color Temp

83 CRI:	90+ CRI:	
27 - 2700K-83	229 - 2200K-90+	CRISP - CrispWhite (16W max)
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+	

- 11** Driver (for non-dimming select LE/TE option)
LE/TE - TRIAC/ELV dimming, 5% dim (standard)
HILUME-H-ECO - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black
0-10V - 0-10V dimming, 1% dim
DALI - EldoLED, 1% dim

- 12** Options/Accessories (see additional details below)
SNAH - snoot accessory holder, 1" length, matte black interior, exterior finish matches fixture finish, accepts cross blade plus 2 additional forms of media
AH - accessory holder, finish matches fixture finish, accepts 2 forms of media
HEX - hexcell louver, 1/8" x 1/8" (requires SNAH or AH)
CB - cross blade, matte black finish (requires SNAH)
SOL - solite lens (requires AH or SNAH)

PROJECT:

TYPE:

Specifications

Application

Retail, commercial and hospitality accent and display lighting

Construction

Extruded Fixture Body (Roll formed for curved version)
Cast Corner Pieces
Stamped Steel top panel
Complete die-cast optical head construction
No exposed wiring

Optical

Changeability from Recessed to Semi-Recessed in field
Tilt: 0-35° Recessed, 0-50° Semi-Recessed
Rotation: 360°+
Beam Spreads: Spot, 15°; Narrow Flood, 22°;
Medium Flood, 25°; Flood, 28°; Wide Flood, 40°;
Very Wide Flood, 60°; Linear Spread, 60° x 10°

LED

Color Temp Options:
2200K, 2700K, 3000K, 3500K, 4000K, CRISP
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite* LED available, 16W max
Class A** 3000K (high CRI, high gamut)
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: 11, 16, 18
Electronic constant current LED driver, 120V-277V 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: For EM fixture - remote EM inverter by others

Drivers

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron and DALI systems also available
See pages 10-11 for more dimming information

Finish

Powder coat paint
Consult Factory for custom finishes

Mounting

2-Point Aircraft Cable with adjustable balance connector
Rigid Stem (field cuttable)
Surface Mount and Conduit Surface Mount available

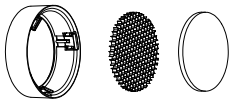
Certifications

CSA listed to UL standards. Suitable for damp locations
Indoor use only

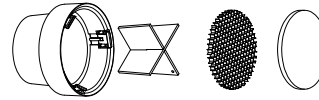
Warranty

5 year limited warranty

Accessories (diagrams show installation order)



Accessory holder, hexcell louver, solite lens



Snoot accessory holder, cross blade, hexcell louver, solite lens

PROJECT:

TYPE:

Electrical Data

1 Light

	1 x 11W		1 x 16W		1 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	11	0.09	16	0.13	18	0.15
277V	11	0.04	16	0.06	18	0.07

Electronic constant current LED driver

2 Light

	2 x 11W		2 x 16W		2 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	22	0.18	32	0.27	36	0.30
277V	22	0.08	32	0.12	36	0.13

Electronic constant current LED driver

3 Light

	3 x 11W		3 x 16W		3 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	33	0.28	48	0.40	54	0.45
277V	33	0.12	48	0.17	54	0.19

Electronic constant current LED driver

4 Light

	4 x 11W		4 x 16W		4 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	44	0.37	64	0.53	72	0.60
277V	44	0.16	64	0.23	72	0.26

Electronic constant current LED driver

Hornet[®] HP

Pendant/Surface Multiples

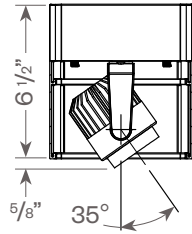


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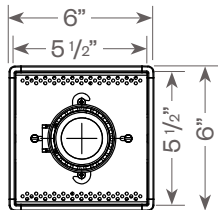
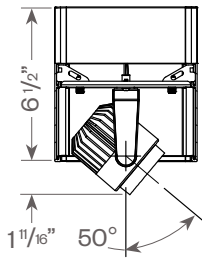
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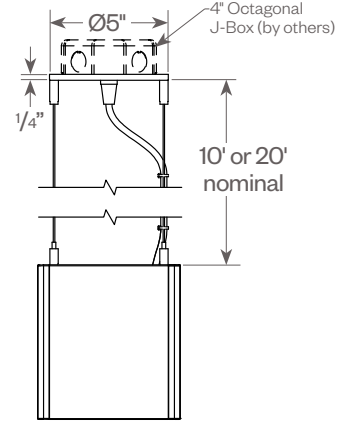
Recessed



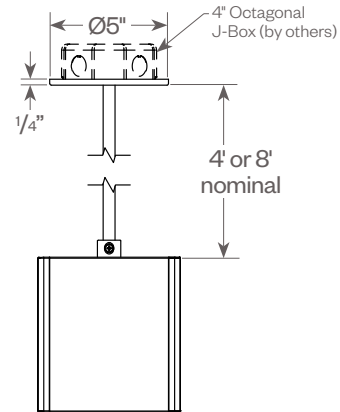
Semi-Recessed



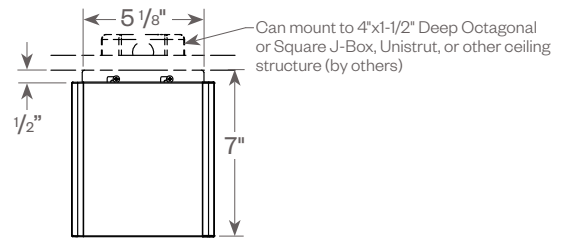
Aircraft Cable Suspension



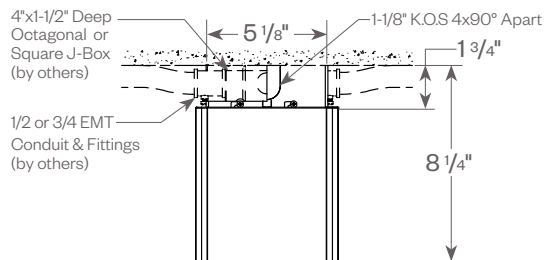
Rigid Stem Mounting



Surface Mount



Conduit Surface Mount



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Pendant/Surface Multiples

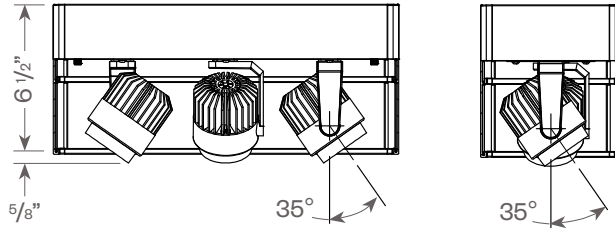


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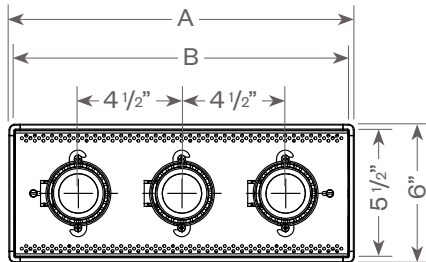
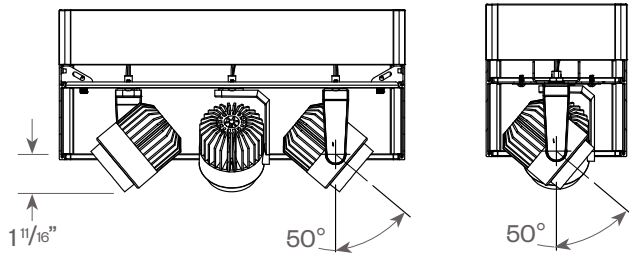
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Hornet HP Pendant Multiples: 2-4 Lights Straight

Recessed

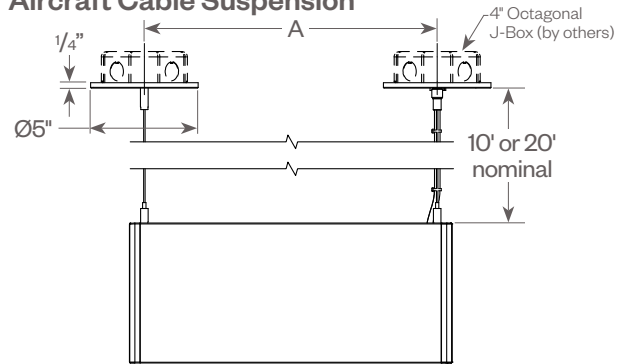


Semi-Recessed



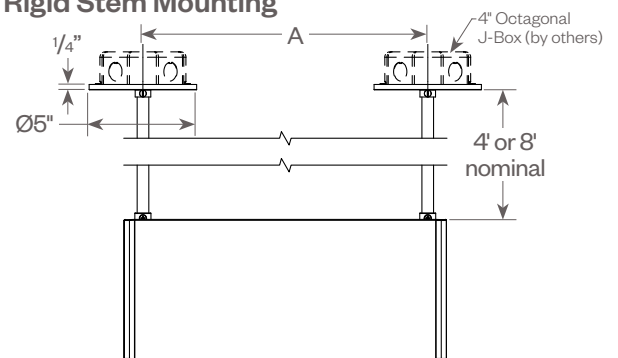
	2 Light	3 Light	4 Light
A	10 1/2"	15"	19 1/2"
B	10"	14 1/2"	19"

Aircraft Cable Suspension



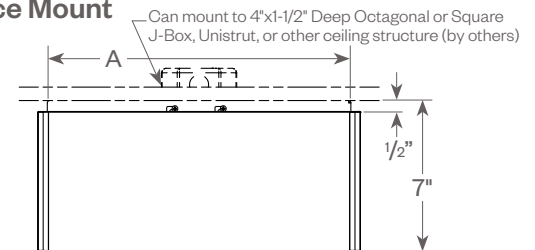
	2 Light	3 Light	4 Light
A	9 1/8"	13 5/8"	18 1/8"

Rigid Stem Mounting



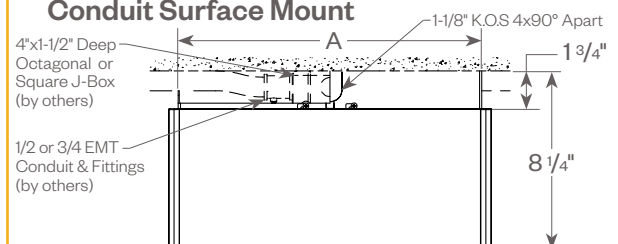
	2 Light	3 Light	4 Light
A	8 3/4"	13 1/4"	17 3/4"

Surface Mount



	2 Light	3 Light	4 Light
A	9 5/8"	14 1/8"	18 5/8"

Conduit Surface Mount



	2 Light	3 Light	4 Light
A	9 5/8"	14 1/8"	18 5/8"

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Pendant/Surface Multiples

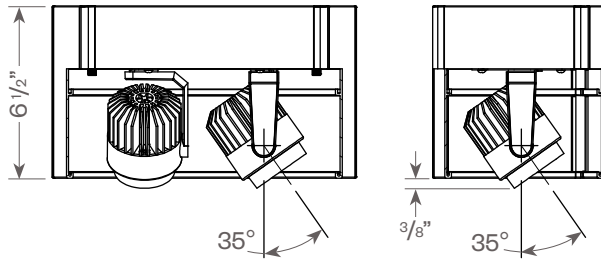


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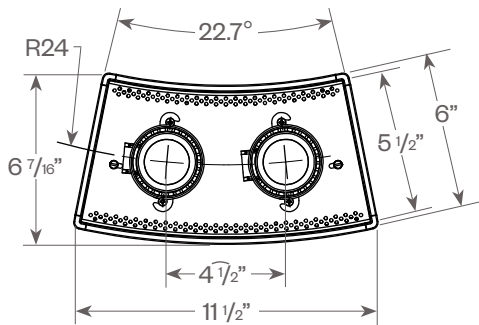
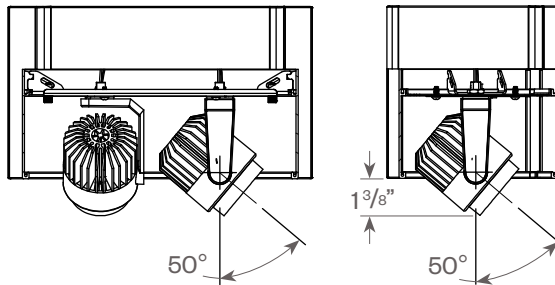
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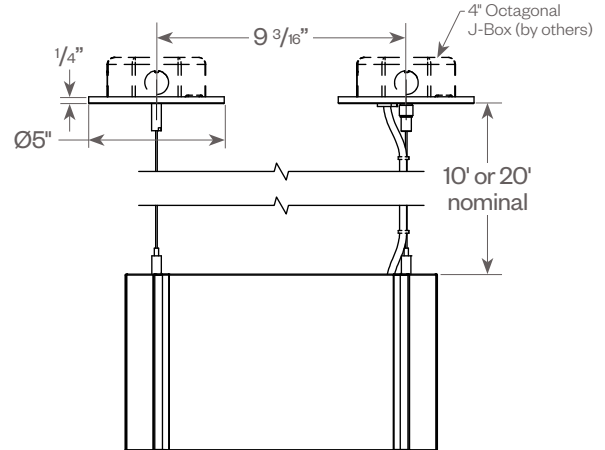
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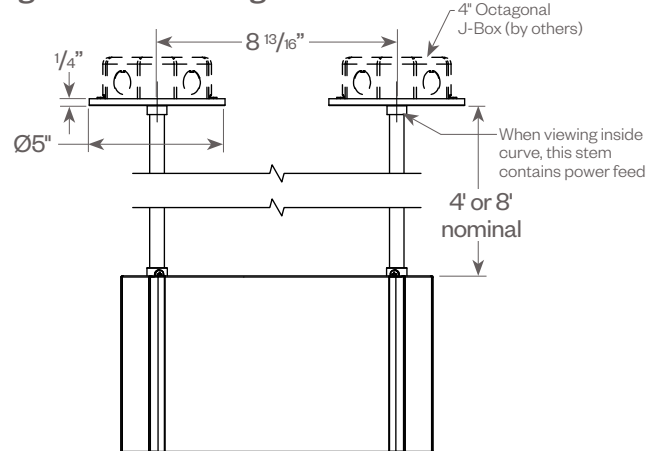
Semi-Recessed



Aircraft Cable Suspension



Rigid Stem Mounting



Hornet[®] HP

Pendant/Surface Multiples

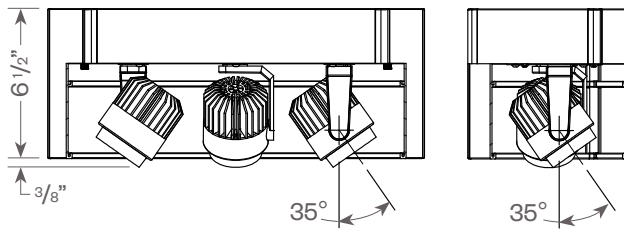


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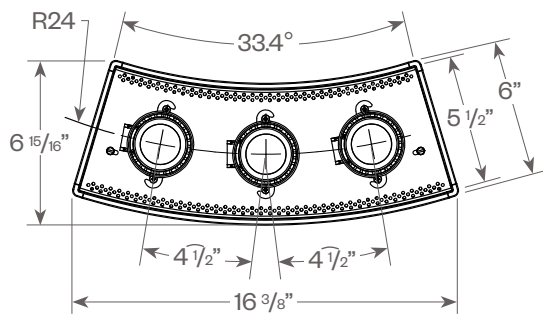
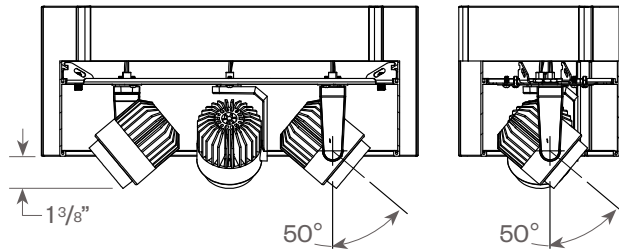
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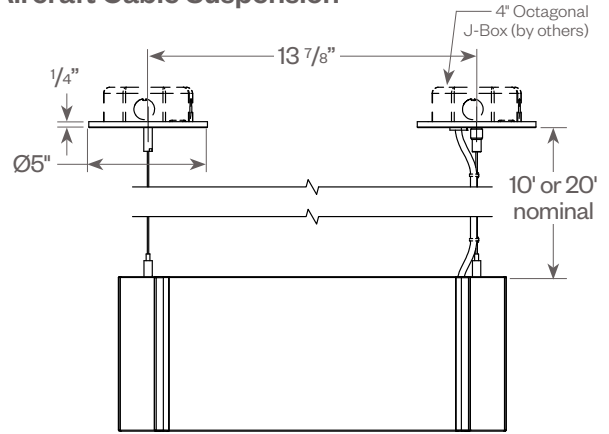
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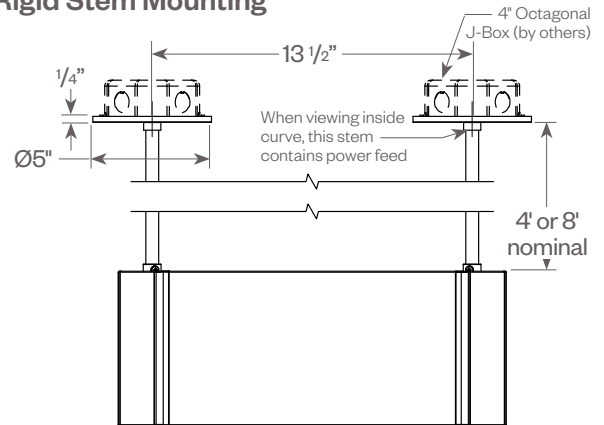
Semi-Recessed



Aircraft Cable Suspension



Rigid Stem Mounting



Hornet[®] HP

Pendant/Surface Multiples



PROJECT:

TYPE:

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:	11W	16W	18W
Factor:	0.71	1.0	1.13

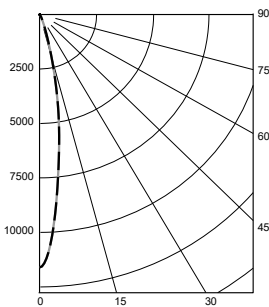
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP*	3CLA
Factor:	0.71	0.80	0.83	0.87	0.90	0.65	0.75

* Not available for use with 18W

16W, 3000K-83

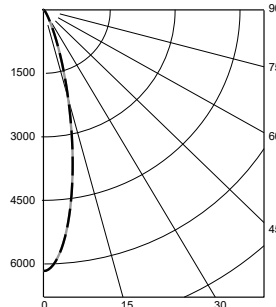
Spot (SP) Distribution, 15°
LTL #14346087.01
Lumens: 1,451



Candelas at Nadir

Deg	Candela
0	11610
5	8378
15	1825
25	257
35	86
45	31

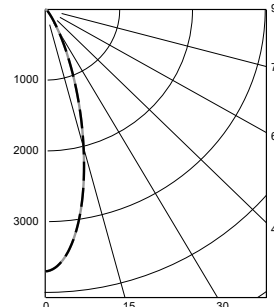
Narrow Flood (NF) Distribution, 22°
LTL #14346087.02
Lumens: 1,390



Candelas at Nadir

Deg	Candela
0	6167
5	5391
15	2012
25	426
35	119
45	52

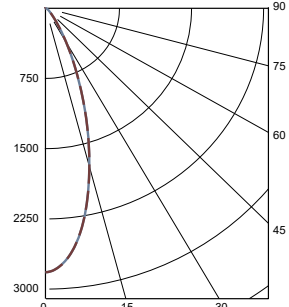
Flood (FL) Distribution, 28°
LTL #14346087.04
Lumens: 1,370



Candelas at Nadir

Deg	Candela
0	3703
5	3440
15	1925
25	651
35	179
45	67

Wide Flood (WF) Distribution, 40°
LTL #14346087.05
Lumens: 1,374



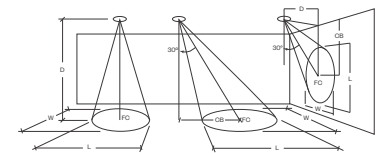
Candelas at Nadir

Deg	Candela
0	2820
5	2674
15	1750
25	763
35	248
45	86

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.



	0° Aiming Angle Horizontal Footcandles				30° Aiming Angle Horizontal Footcandles					30° Aiming Angle Vertical Footcandles					60° Aiming Angle Vertical Footcandles				
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
Spot	5.0'	463	1.4	1.4	5.0'	213	2.3	2.2	3.0	3.0'	135	3.4	2.2	5.0	3.0'	403	1.8	1.6	2.0
	7.5'	206	2.1	2.1	7.5'	110	3.3	2.9	4.0	4.0'	87	4.2	2.6	6.0	4.0'	295	2.1	1.8	2.0
	10.0'	116	2.9	2.9	10.0'	64	4.3	3.7	5.0	5.0'	58	5.2	3.2	8.0	5.0'	205	2.5	2.2	3.0
	12.5'	74	3.6	3.6	12.5'	44	5.1	4.5	7.0	6.0'	42	6.2	3.6	9.0	6.0'	162	2.8	2.5	3.0
Narrow Flood	5.0'	247	1.9	1.9	5.0'	133	2.9	2.7	3.0	3.0'	97	3.7	2.4	4.0	3.0'	280	2.1	1.8	2.0
	7.5'	110	3.0	3.0	7.5'	67	4.0	3.6	4.0	4.0'	57	4.8	3.1	5.0	4.0'	201	2.4	2.2	2.0
	10.0'	62	3.9	3.9	10.0'	40	5.2	4.6	5.0	5.0'	39	5.7	3.6	7.0	5.0'	131	3.0	2.7	3.0
	12.5'	40	5.0	5.0	12.5'	26	6.4	5.7	6.0	6.0'	28	6.9	4.3	8.0	6.0'	99	3.4	3.0	3.0
Flood	5.0'	168	2.5	2.5	5.0'	86	3.6	3.2	2.0	3.0'	70	3.9	2.9	4.0	3.0'	194	2.4	2.2	2.0
	7.5'	72	3.7	3.7	7.5'	42	5.0	4.6	4.0	4.0'	43	5.1	3.5	5.0	4.0'	138	2.8	2.7	2.0
	10.0'	40	5.0	5.0	10.0'	25	6.5	5.9	5.0	5.0'	28	6.2	4.4	6.0	5.0'	87	3.6	3.2	2.0
	12.5'	25	6.3	6.3	12.5'	16	8.2	7.4	6.0	6.0'	20	7.5	5.2	7.0	6.0'	65	4.0	3.7	3.0
Wide Flood	5.0'	113	3.0	3.0	5.0'	71	3.9	3.5	2.0	3.0'	60	4.1	3.1	3.0	3.0'	156	2.7	2.5	2.0
	7.5'	50	4.5	4.5	7.5'	34	5.5	5.1	3.0	4.0'	36	5.3	3.9	4.0	4.0'	110	3.1	3.0	2.0
	10.0'	28	6.0	6.0	10.0'	19	7.4	6.8	5.0	5.0'	24	6.4	4.8	5.0	5.0'	72	3.9	3.5	2.0
	12.5'	18	7.5	7.5	12.5'	13	9.1	8.4	6.0	6.0'	17	7.7	5.7	7.0	6.0'	52	4.5	4.2	3.0

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 ---

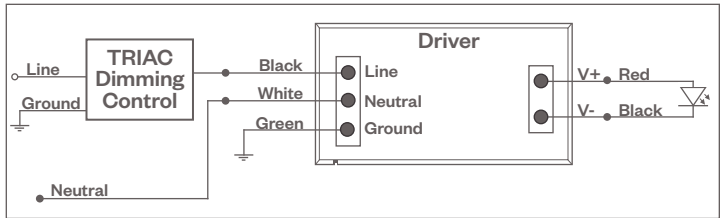
TRIAC (Forward Phase) DIMMING (Standard)

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"	

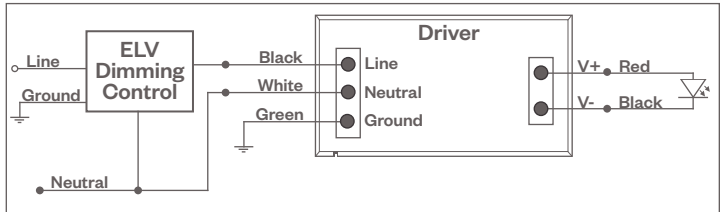
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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[®] 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 ---

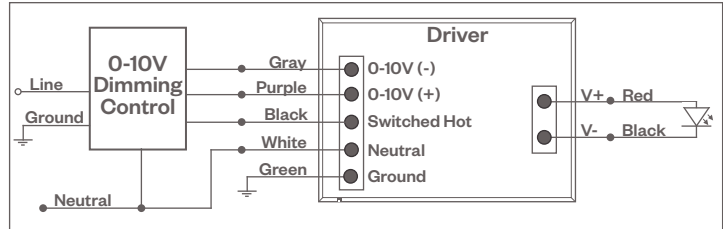
0-10V DIMMING

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

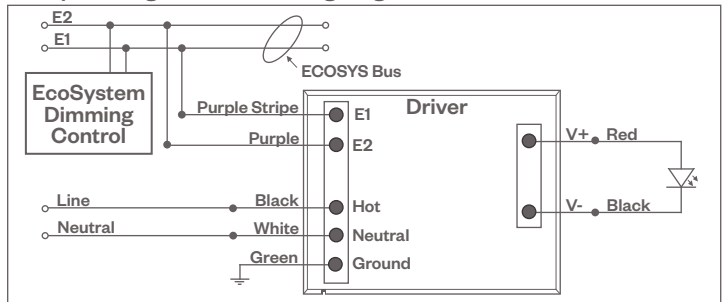
Integrates into Lutron EcoSystem building management

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
Energi Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

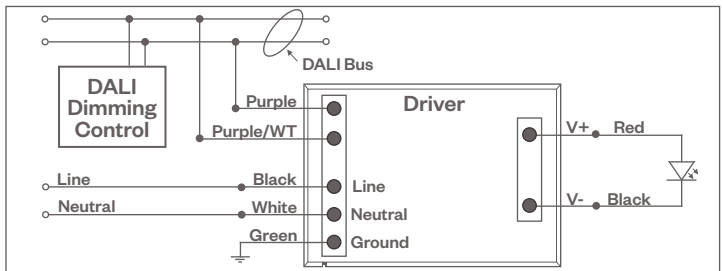
DALI DIMMING

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.