

Hornet[®] HP

Remodeler Multiples



Features

Hornet High Power (HP) Remodeler Multiples perform beautifully, punching through higher ambient light with strong output making them perfect for retail applications. For install into existing ceilings, Hornet HP Remodeler Multiples are ideal for delivering great performance, energy efficiency, and maximum control over where and how you want to place light.

Product Overview

Type:	Remodeler Multiple, Accent & Display
Wattage:	11, 16, 18
Lumen Output:	1,369 max; 76 Lm/W (spot optic)
CBCP:	12,215 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:

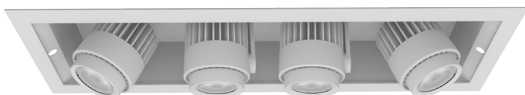
TYPE:



2 Light



3 Light



4 Light (Semi-Recessed Remodeler shown)

Fixture Summary (see following pages for more information)

Fixture Type

# of Heads	New Construction	Remodeler	Trim	Trimless
1	No	Yes	Yes	No
2	No	Yes	Yes	No
3	No	Yes	Yes	No
4	NO	Yes	Yes	NO

See separate spec sheet for Recessed or Semi-Recessed versions.

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
11	972	88	8,673	3000K-83
16	1,205	75	10,749	3000K-83
18	1,369	76	12,215	3000K-83

Data is based on 3000K-83, 120V IES files available on website

Data is "per head" and based on Spot optic

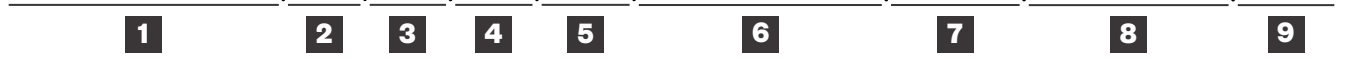
See page 9 for other beam spreads



PROJECT:

TYPE:

Ordering Information



- 1** Model
HORNET-HP-R-REM (recessed)
HORNET-HP-SR-REM (semi-recessed)

- 2** # of Heads
 1
 2
 3
 4

- 3** Wattage
 11
 16
 18

- 4** Finish (for housing, head & trim)
WT - white texture
BT - black texture
ST - silver texture
Other finishes, consult factory

- 5** Voltage
 120
 277

- 6** Beam Spreads

<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 45°)
VWF	VWF	VWF	VWF	(very wide flood 60°)
LS	LS	LS	LS	(linear spread lens 60°x10°)

- 7** Color Temp

<u>83 CRI:</u>	<u>90+ CRI:</u>
27 - 2700K-83	229 - 2200K-90+ CRISP - CrispWhite
30 - 3000K-83	279 - 2700K-90+ (16W max)
35 - 3500K-83	309 - 3000K-90+ 3CLA - 3K Class A
40 - 4000K-83	359 - 3500K-90+
	409 - 4000K-90+

- 8** 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

- 9** Options/Accessories
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

Thermally protected (adds 2W to total fixture wattage)
Steel driver housing
Steel upper housing and laser cut trim ring
Complete die-cast optical head construction
No exposed wiring

Optical

Tilt: 0-40°x40° (REM)
Rotation: 360°+
Beam Spreads: Spot, 15°; Narrow Flood, 22°;
Medium Flood, 25°; Flood, 28°; Wide Flood, 45°;
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, 120/277VAC input
This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Drivers

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

Swing out lugs permit from below mounting into gyp or wood type ceilings, 5/8" min - 1-1/2" max thickness

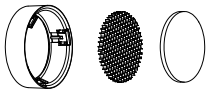
Certifications

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

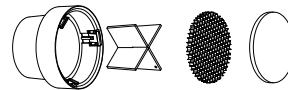
Warranty

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

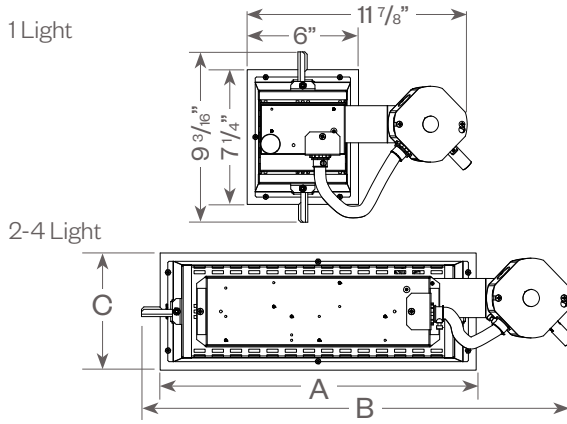
	4 x 11W		4 x 16W		4 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	44	0.37	64	0.53	72	0.60
277V	44	0.16	64	0.23	72	0.26

Electronic constant current LED driver

PROJECT:

TYPE:

Hornet HP Multiples: Recessed Remodeler

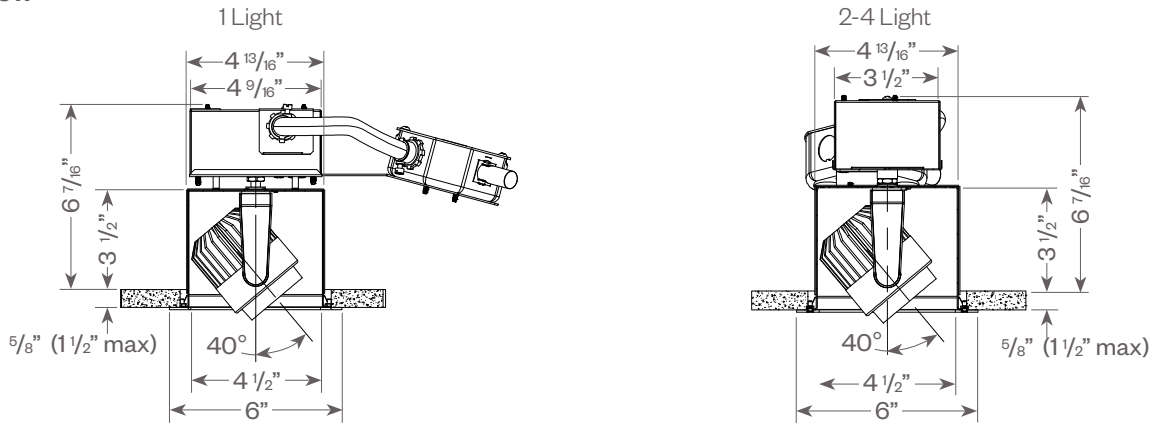


	2 Light	3 Light	4 Light
A	11 3/4"	16 1/4"	20 3/4"
B	17 1/2"	22"	26 1/2"
C	6"	6"	6"

Ceiling cut out: 1 Light - 5 1/4" x 6 5/8"
 2 Light - 5 1/4" x 11 1/8"
 3 Light - 5 1/4" x 15 5/8"
 4 Light - 5 1/4" x 20 1/8"

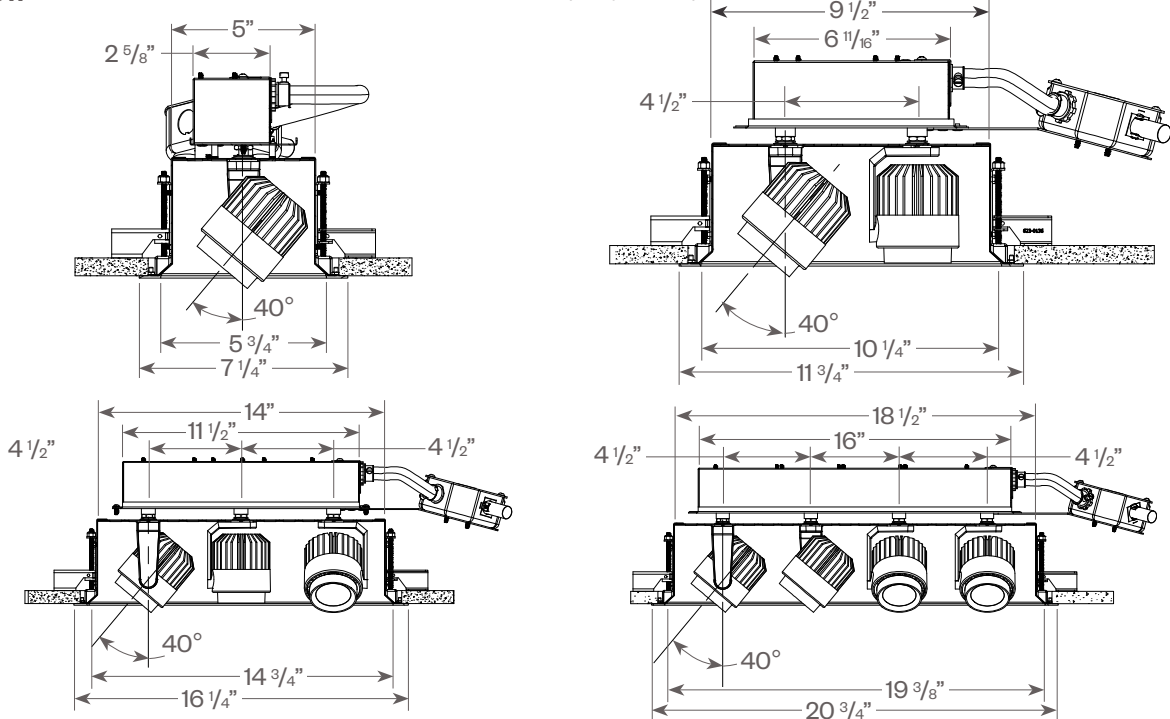
End View

Standard Driver (ELV/TRIAC)



Side View

Standard Driver (ELV/TRIAC)



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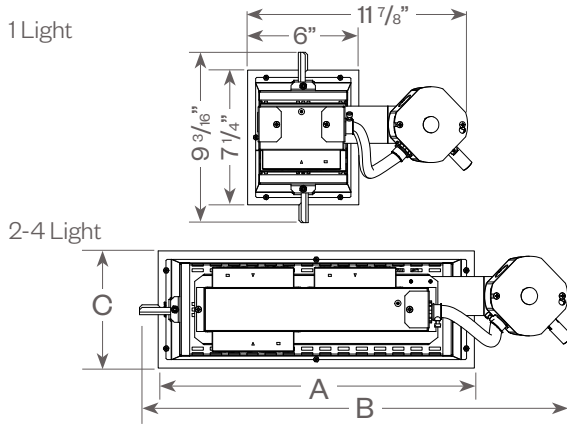
Remodeler Multiples



PROJECT:

TYPE:

Hornet HP Multiples: Recessed Remodeler

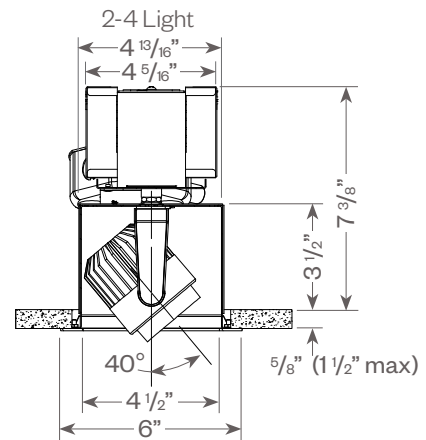
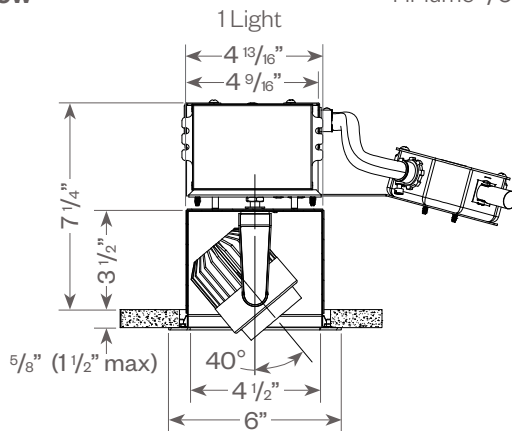


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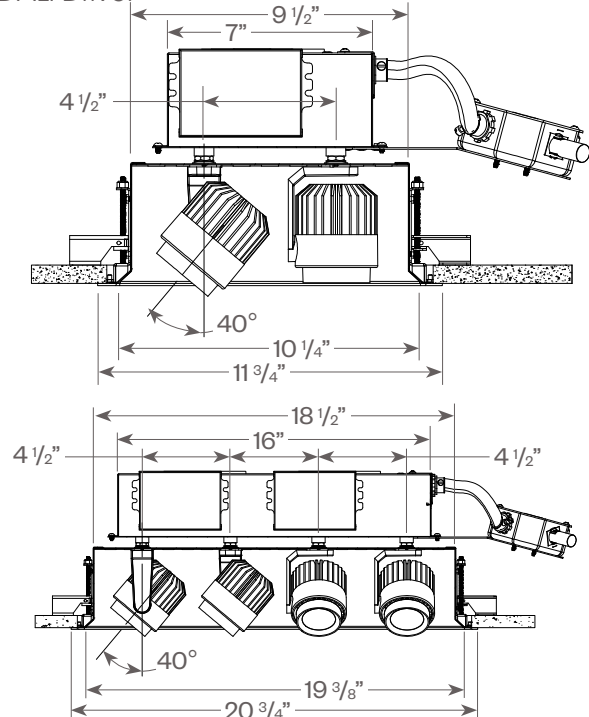
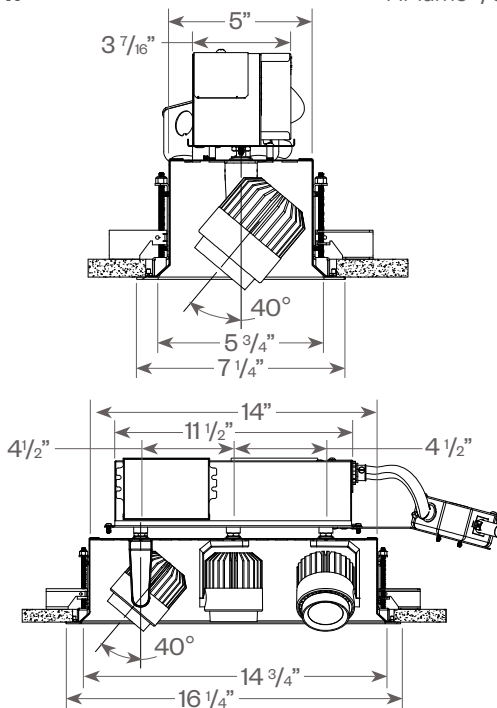
End View

Hi-lume[®]/0-10V/DALI Driver



Side View

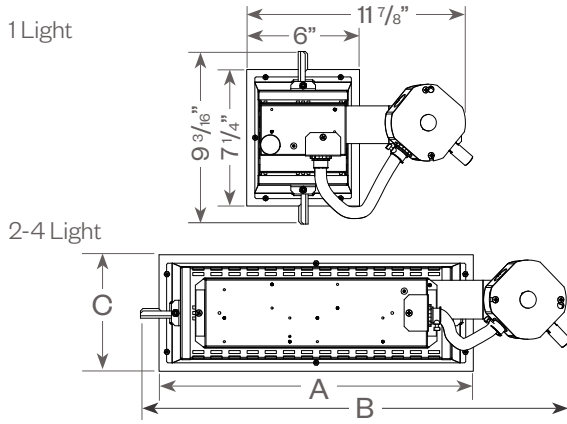
Hi-lume[®]/0-10V/DALI Driver



PROJECT:

TYPE:

Hornet HP Multiples: Semi-Recessed Remodeler

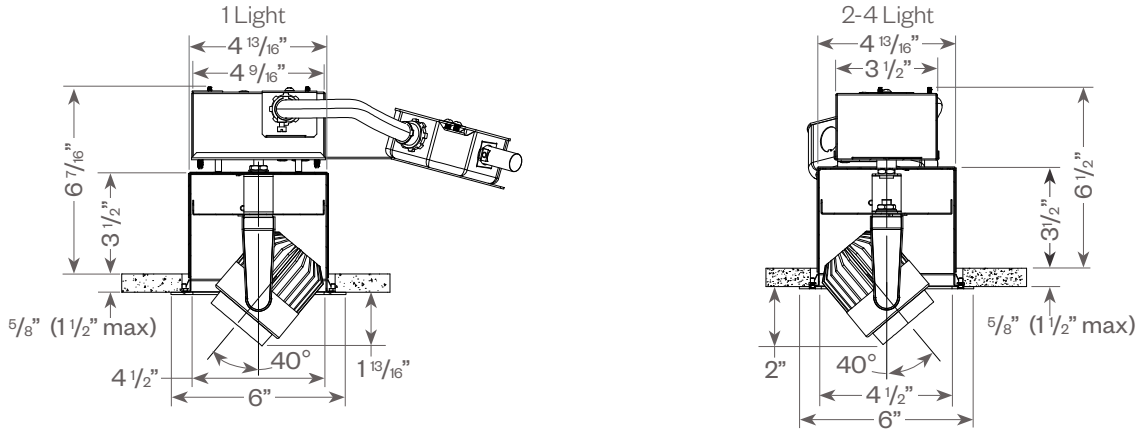


	2 Light	3 Light	4 Light
A	11 3/4"	16 1/4"	20 3/4"
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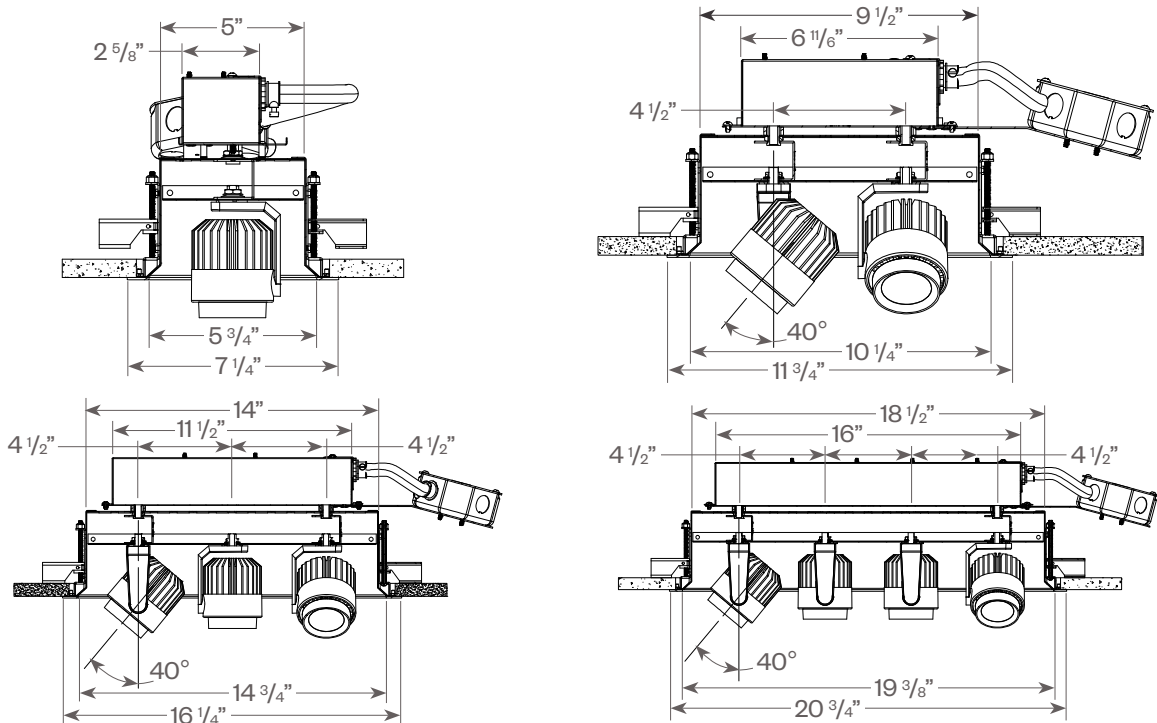
End View

Standard Driver (ELV/TRIAC)



Side View

Standard Driver (ELV/TRIAC)



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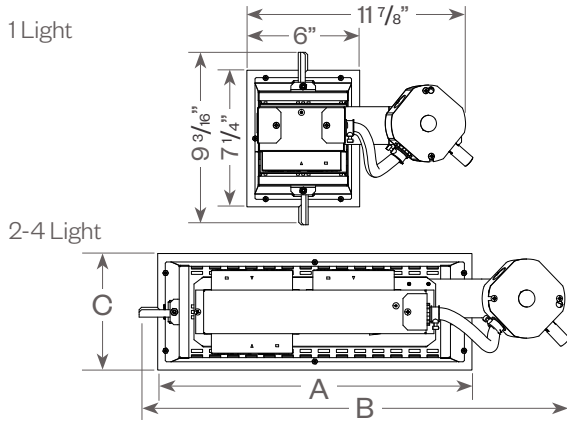
Remodeler Multiples



PROJECT:

TYPE:

Hornet HP Multiples: Semi-Recessed Remodeler

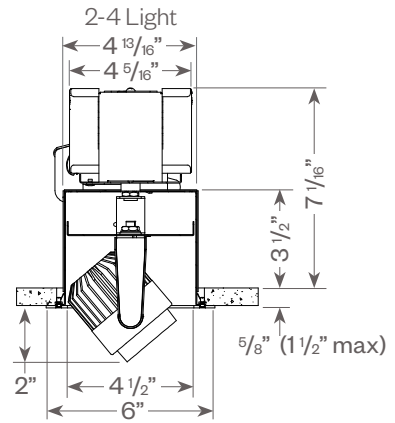
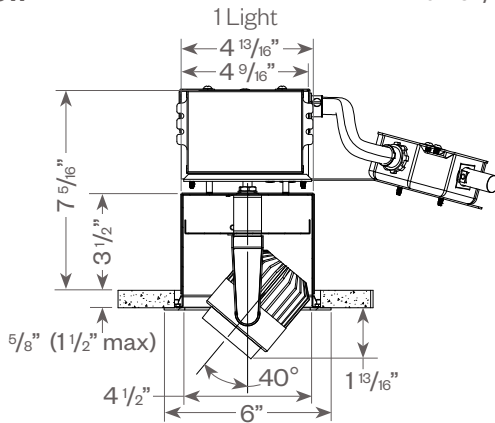


	2 Light	3 Light	4 Light
A	11 3/4"	16 1/4"	20 3/4"
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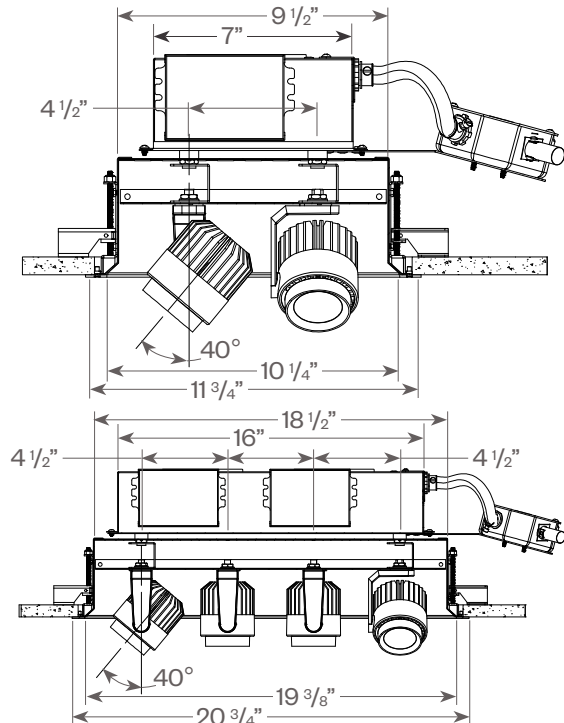
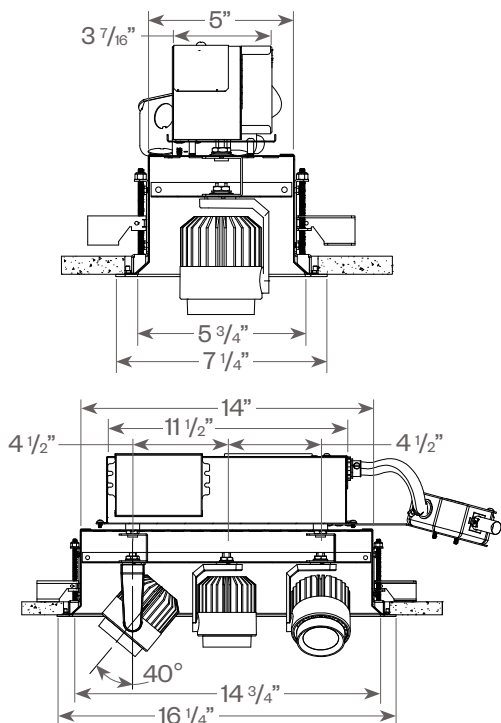
End View

Hi-lume[®]/0-10V/DALI Driver



Side View

Hi-lume[®]/0-10V/DALI Driver



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)

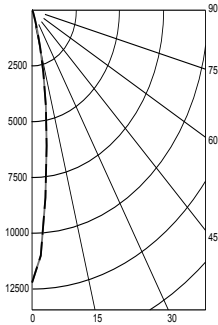
Wattage:	11W	16W	18W
Factor:	0.71	0.88	1.0

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

18W LED, 3000K-83 (Note: Data is per head)

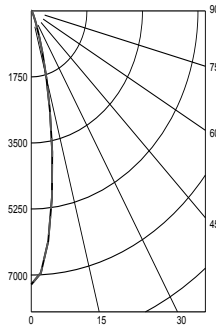
Spot (SP) Distribution, 15°
LTL #855377
Lumens: 1,369



Candelas at Nadir

Deg	Candela
0	12215
5	8436
15	1705
25	204
35	77
45	26

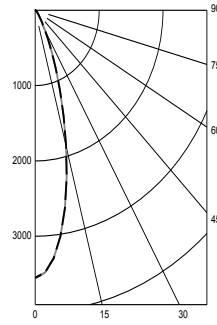
Narrow Flood (NF) Distribution, 22°
LTL #860527
Lumens: 1,307



Candelas at Nadir

Deg	Candela
0	7252
5	6128
15	1841
25	309
35	93
45	41

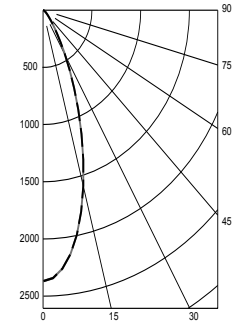
Flood (FL) Distribution, 28°
LTL # 860528
Lumens: 1,285



Candelas at Nadir

Deg	Candela
0	3551
5	3304
15	1861
25	612
35	156
45	57

Wide Flood (WF) Distribution, 45°
LTL # 860529
Lumens: 1,278



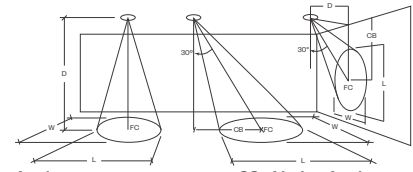
Candelas at Nadir

Deg	Candela
0	2369
5	2268
15	1592
25	754
35	251
45	82

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'	484	1.4	1.4	5.0'	313	1.8	1.5	3.0	3.0'	178	3.0	1.6	5.0	3.0'	630	1.6	1.1	2.0
	7.5'	216	2.0	2.0	7.5'	136	2.8	2.4	4.0	4.0'	105	3.8	2.1	6.0	4.0'	450	1.6	1.3	2.0
	10.0'	122	2.7	2.7	10.0'	76	3.7	3.2	6.0	5.0'	67	4.8	2.7	8.0	5.0'	298	2.0	1.6	3.0
	12.5'	78	3.4	3.4	12.5'	46	4.8	4.2	7.0	6.0'	47	5.9	3.2	9.0	6.0'	200	2.4	1.9	3.0
Narrow Flood	5.0'	289	1.7	1.7	5.0'	187	2.4	2.1	3.0	3.0'	127	3.3	1.8	4.0	3.0'	422	1.9	1.3	2.0
	7.5'	129	2.8	2.8	7.5'	86	3.5	3.1	4.0	4.0'	70	4.4	2.7	6.0	4.0'	298	1.9	1.5	2.0
	10.0'	73	3.6	3.6	10.0'	47	4.7	4.1	5.0	5.0'	47	5.3	3.2	7.0	5.0'	181	2.5	2.1	3.0
	12.5'	47	4.5	4.5	12.5'	31	5.8	5.2	7.0	6.0'	32	6.7	3.9	8.0	6.0'	133	2.8	2.5	3.0
Flood	5.0'	142	2.7	2.7	5.0'	92	3.4	3.1	3.0	3.0'	75	3.8	2.7	4.0	3.0'	232	2.3	1.7	2.0
	7.5'	63	3.9	3.9	7.5'	43	4.9	4.4	4.0	4.0'	44	4.9	3.3	5.0	4.0'	154	2.7	2.4	2.0
	10.0'	36	5.2	5.2	10.0'	25	6.4	5.8	5.0	5.0'	29	6.1	4.1	6.0	5.0'	95	3.4	3.0	2.0
	12.5'	23	6.5	6.5	12.5'	16	8.0	7.2	6.0	6.0'	20	7.4	5.1	7.0	6.0'	69	3.8	3.5	3.0
Wide Flood	5.0'	96	3.2	3.2	5.0'	67	3.9	3.4	2.0	3.0'	63	3.7	2.8	3.0	3.0'	180	2.4	2.0	1.0
	7.5'	42	4.8	4.8	7.5'	30	5.7	5.3	3.0	4.0'	36	4.9	3.7	4.0	4.0'	105	3.2	2.9	2.0
	10.0'	24	6.4	6.4	10.0'	17	7.6	7.1	4.0	5.0'	23	6.1	4.8	5.0	5.0'	69	3.8	3.5	2.0
	12.5'	15	8.0	8.0	12.5'	11	9.6	8.9	5.0	6.0'	16	7.5	5.7	6.0	6.0'	47	4.7	4.3	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 ---

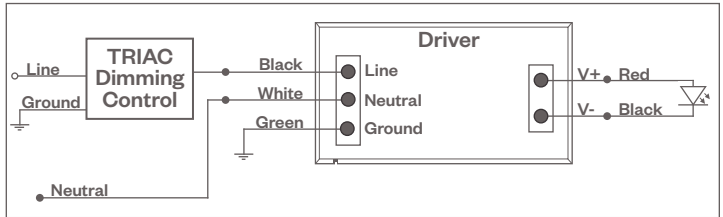
TRIAC (Forward Phase) DIMMING (Standard)

Utilizes "Standard" incandescent 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 (Incandescent Style, Wattage as required)		Central System
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

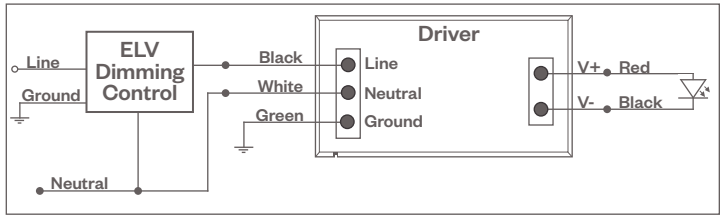
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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 Style)		Central System
Lutron "Diva"	Leviton "Surslide"	Lutron "GP" Panel with PHPM-PA Interface
Lutron "Nova-T"	Leviton "Vizio"	Lutron Grafik Eye QS with PHPM-PA Interface
Lutron "Maestro"		
Lutron "Vareo"		
Lutron "Skylark"		

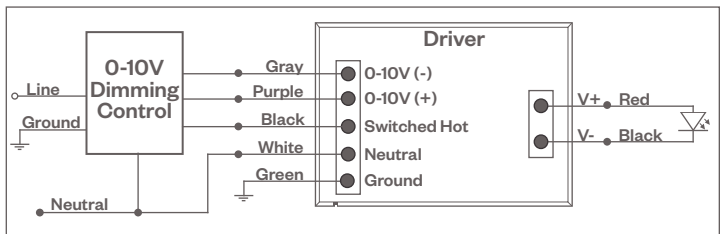
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

0-10V Wiring Diagram



Compatible Dimmers†:

Wall Box	Central System
Lutron "Diva" - DVTV with PP-120H Interface	Leviton Renoir II 0-10V
	Lutron Grafik Eye with GRX-TVI Interface

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

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 ---

LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

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!

Compatible Dimmers†:

Lutron ECO System

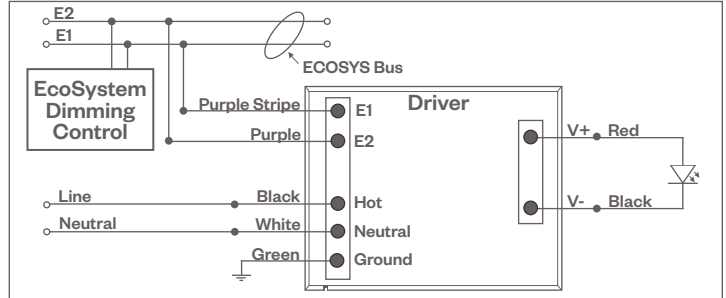
Pow Pak Dimming Modules
Energi Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

HILUME-H-ECO, HILUME-5-ECO

EcoSystem Digital Control Wiring Diagram



DALI DIMMING (-DALI OPTION)

Digital control protocol allows individual fixture control

Notes:

- 120VAC - 277VAC*
- Dims down to 1% light output in most cases

Compatible Dimmers†:

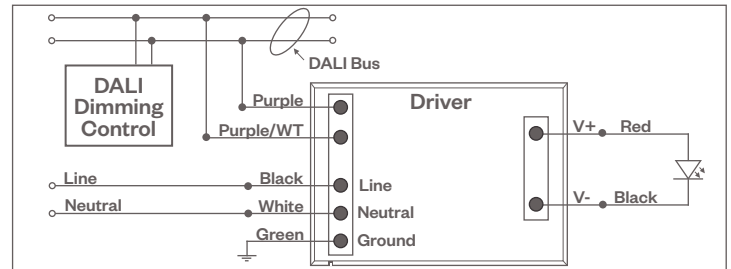
Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

Central System

Dynalite
Fifth Light

DALI Wiring Diagram



Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.