

DESIGN AND PERFORMANCE VERSATILITY WITH UNMATCHED FABRICATION FLEXIBILITY

Photography: © Bob Perzel



TRIFAB® VERSAGLAZE® 450, 451 & 451T (THERMAL) FRAMING SYSTEMS & TRIFAB® 451UT (ULTRA THERMAL) FRAMING SYSTEM

Trifab® VersaGlaze® is built on the proven and successful Trifab® platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The 4.5" depth Trifab® VersaGlaze® Framing System family is available with non-thermal, thermal and ultra-thermal performance levels. The ultra-thermal Trifab® 451UT Framing System, is designed for the most demanding thermal performance and employs actual Isolock® thermal break.



AESTHETICS

Trifab® VersaGlaze® Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone glazing (SSG) and weatherseal glazing options further expand designers' choice, allowing for a greater range of possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab® VersaGlaze® 450 has 1-3/4" sightlines, while Trifab® VersaGlaze® 451/451T and Trifab® 451UT have 2" sightlines.

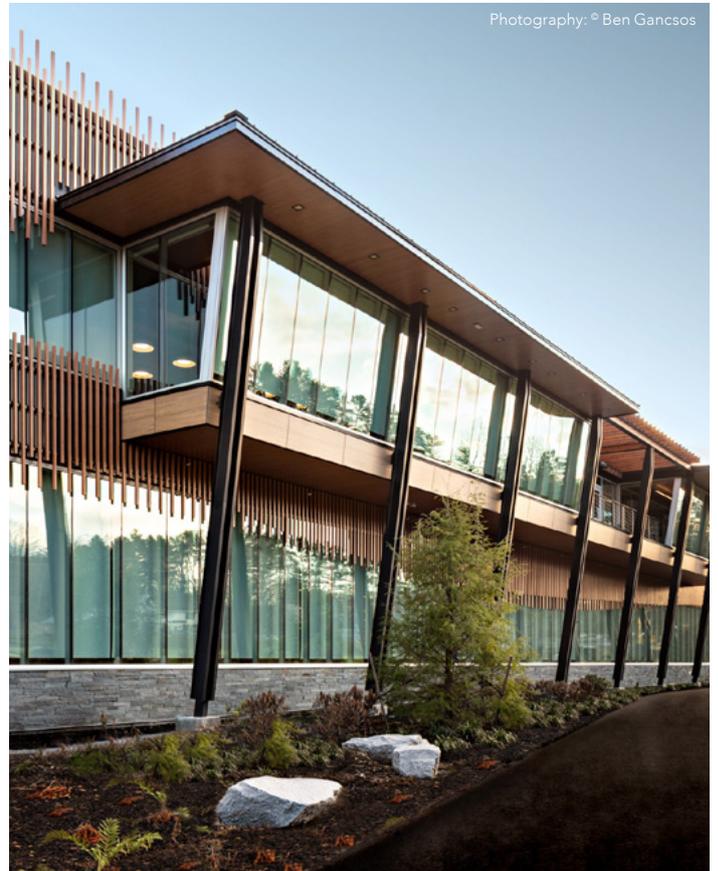
With seamless incorporation of Kawneer entrances or windows, including GLASSvent® visually frameless ventilators, Trifab® framing can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.

ECONOMY

Trifab® VersaGlaze® 450/451/451T/451UT Framing Systems offer a variety of fabrication choices to suit your project:

- **Screw Spline** – for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units for efficient handling and installation. (available for all Trifab systems)
- **Shear Block** – for punched openings or continuous runs using tubular verticals with shear blocks to connect horizontal members. (available for 450/451/451T systems)
- **Stick** – for fast, easy field fabrication. Continuous sill and head receptors are installed with horizontals connected to tubular verticals with shear blocks. (available for 450/451/451T systems)
- **Pre-glazed** – The combination of screw spline construction with pre-glazing in the shop accelerates installation and reduces field labor time while minimizing disruption to the surrounding area or existing tenants. Making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited. (available for 451/451T/451UT framing)

Photography: © Ben Gancsos



All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab® VersaGlaze® 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

FOR THE FINISHING TOUCH

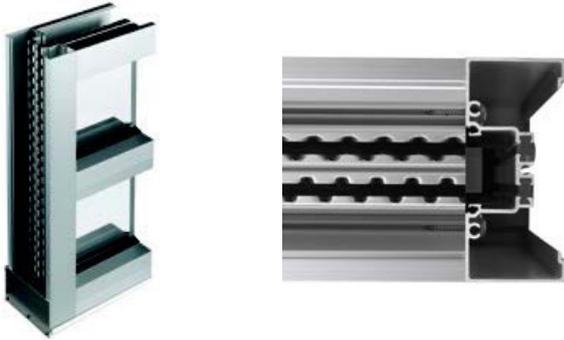
Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

PERFORMANCE

Kawneer's Isolock® thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab® VersaGlaze® 451T. For even greater thermal performance, a dual Isolock® thermal break is used on Trifab® 451UT.

U-factor, CRF values and STC ratings for Trifab® framing systems vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project.

(See the Kawneer Architectural Manual or Kawneer.com for additional information.)

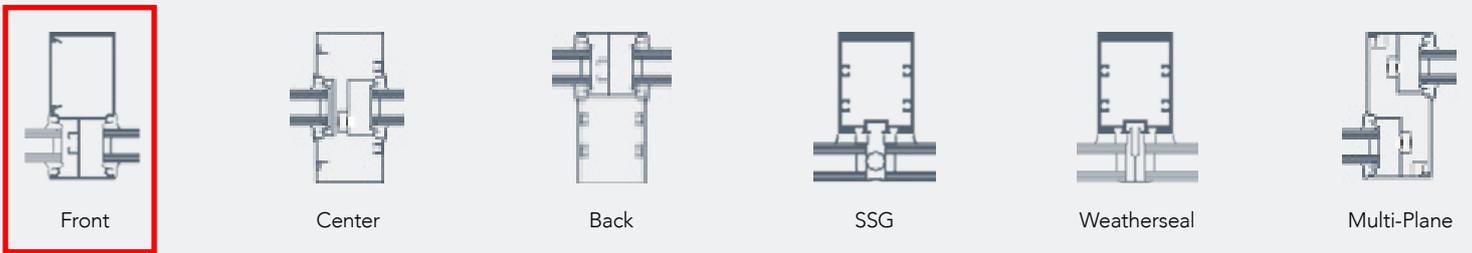
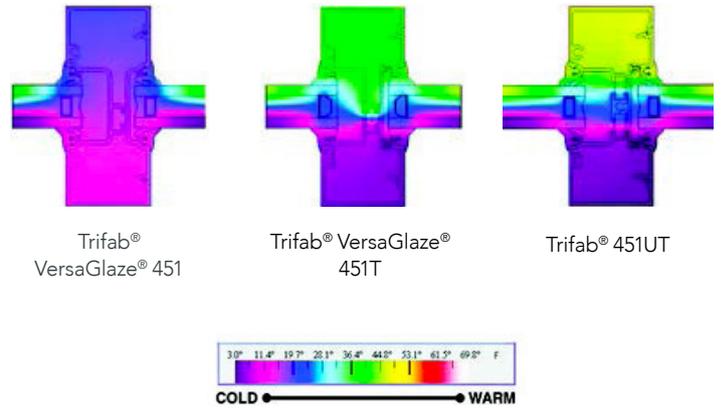


Trifab® 451UT uses a dual Isolock® thermal break (right) and features a new high performance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

PERFORMANCE TEST STANDARDS

Air Infiltration	ASTM E283
Water	AAMA 501, ASTM E331
Structural	ASTM E330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E1425

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



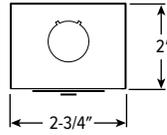
KAWNEER ANODIZED FINISHES

Kawneer gives you a wide variety of anodized finishes with attractive alternatives. The benefit of a durable, anodized finish is married to the beauty of some very dynamic and exciting colors.

At the start of every design, there's a choice of how you want to finish. Contact your Kawneer sales rep for the information on these and other finishes available from Kawneer.

	KAWNEER FINISH NO.	COLOR	ALUMINUM ASSOCIATION SPECIFICATION	OTHER COMMENTS
	#14	CLEAR	AA-M10C21A41	Architectural Class I (0.7 mils minimum)
	#17	CLEAR	AA-M10C21A31	Architectural Class II (0.4 mils minimum)
	#40	DARK BRONZE	AA-M10C21A44	Architectural Class I (0.7 mils minimum)
	#29	BLACK	AA-M10C21A44	Architectural Class I (0.7 mils minimum)

75 LED Narrow Strip



75 Shown

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- Small fixture profile allows inconspicuous placement in coves or confined spaces
- Round and square lensed fixtures provide a clean look for architectural environments
- Row applications produce continuous light with minimal interruption between fixtures
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare
- Variety of mounting accessories for surface and suspended applications
- Special reflectors are available to provide precise light distribution (75 only)
- Maximize energy savings with efficacies as high as 171 lm/W
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 22-gauge die-formed C.R.S.
- FINISH** – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High quality mid-power LED board. Rated for 50,000 hours at 70% lumen maintenance (L70). 25°C maximum ambient operating temperature.
- MOUNTING** – Surface (ceiling or wall) or suspended (hanging hardware required).
- LISTINGS** –
 - cETLus conforms to UL STD 1598. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations
 - DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at designlights.org/GPL
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.



ORDERING EXAMPLE: 75 - 4 - L85/835 - OPTIONS - DIM - UNV

ORDERING INFO

SERIES	LENGTH ^[1]	LUMENS ^[2]	CRI	CCT	OPTIONS ^[3]
75	2 2'	2'	8 80	27 2700K	EM/7WRM Remote mount 7-watt emergency battery ^[8]
75R	3 3'	L15 1,500lm	9 90 ^[7]	30 3000K	EM/10WLP Low-profile 10-watt emergency battery ^[9]
75S	4 4'	L20 2,000lm		35 3500K	EM/10WRM Remote mount 10-watt emergency battery ^[10]
	8 8'	L30 3,000lm		40 4000K	C2__ Two-circuit quick-connect wiring harness. ^[11]
		L40 4,000lm ^[4]		50 5000K	WG-75 11-gauge white powder coat wireguard
		3'			315 1-1/2" ceiling spacer
		4'			VBV (2) Y-hangers
		L30 3,000lm			VBV-2 (2) Y-hangers and (2) 2' chains
		L50 5,000lm			RA-75 Row aligner ^[12]
		L65 6,500lm			45AMB (2) 45° adjustable mounting brackets ^[13]
		L85 8,500lm ^[5]			(L__) Additional lower lumen packages available. ^[14]
		8'			Example: 7,000 nominal lumens = 75-4-L85/835-(L70)-DIM-UNV
		L40 4,000lm			OCCUPANCY SENSOR
		L60 6,000lm			OCCWS FSP-211-L2-120/277 Digital high/low passive infrared with L2 lens, end mount, 120V or 277V ^[15]
		L100 10,000lm			FSIR-100 Remote controller for occupancy sensor ^[16]
		L130 13,000lm			
		L170 17,000lm ^[6]			

MOUNTING (EXAMPLE: AC/D48) ^[17]

Prefix	Type	Length
AC/	D 1" grid & hardpan	24 24"
	N 9/16" grid	48 48"
	S Slot grid	96 96"

CONTROL ^[18]

Control	Description
DIM	Dimming driver
DRV	Non-dimming driver
VDO/DSR	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver

VOLTAGE

120 120V
277 277V
UNV 120-277V
347 347V ^[19]

QUICKSHIP

4'	8'
75S-4-L50/835-QS-DIM-UNV	75S-8-L100/835-QS-DIM-UNV
75S-4-L50/840-QS-DIM-UNV	75S-8-L100/840-QS-DIM-UNV

NOTES

- For actual length, see page 4 for FIXTURE DETAILS
- Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- See page 5 for FINISH OPTIONS. See page 4 for MOUNTING DETAILS. See page 5 for SPECIAL REFLECTORS.
- Available with 75 only.
- Available with 75 only.
- Available with 75 only.
- Extended lead times may apply. Consult factory for availability.
- 120-277V only
- 4' and 8' only; must specify 120V or 277V
- 2' and 3' only; must specify 120V or 277V
- See page 4 for QUICK CONNECT OPTIONS.
- Required when row mounting with aircraft cables
- Cord recommended, ordered separately. See page 4 for MOUNTING DETAILS. Field-adjustable up and down in 7-1/2" increments.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Optional FSIR-100 remote controller available, ordered separately, see Options. See page 5 for OCCUPANCY SENSOR DETAILS.
- Please specify quantity required per project, ships separately.
- Required with suspended mount fixtures. Units specified with aircraft cable require cord. See page 4 for MOUNTING DETAILS. Requires RA-75 row aligner. See page 4 for MOUNTING ACCESSORIES DETAILS.
- See page 3 for ADDITIONAL CONTROL OPTIONS.
- Not available with EM drivers



FIXTURE PERFORMANCE DATA

		75 (NO LENS)		75R & 75S		
LED PACKAGE	WATTAGE	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	
2'	L15	10.8	1592	147.4	1496	138.6
	L20	14.5	2102	145.0	1976	136.3
	L30	21.3	3092	145.2	2906	136.5
	L40	25.2	3832	152.1	-	-
3'	L40	26.9	3929	146.1	3693	137.3
	L30	19.6	3011	153.6	2830	144.4
4'	L50	31.2	5360	171.8	5038	161.5
	L65	42.3	6313	149.2	5934	140.3
	L85	59.6	8384	140.7	-	-
	L60	35.5	5814	163.8	5465	153.9
8'	L100	63.5	10038	158.1	9436	148.6
	L130	85.5	13069	152.9	12285	143.7
	L170	119.2	17268	144.9	-	-

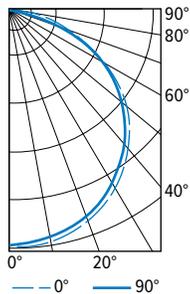
MULTIPLIER TABLE

		COLOR TEMPERATURE	
		CCT	CONVERSION FACTOR
80 CRI	2700K		0.97
	3000K		0.99
	3500K		1.00
	4000K		1.03
	5000K		1.06
90 CRI	2700K		0.80
	3000K		0.82
	3500K		0.83
	4000K		0.86
	5000K		0.89

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

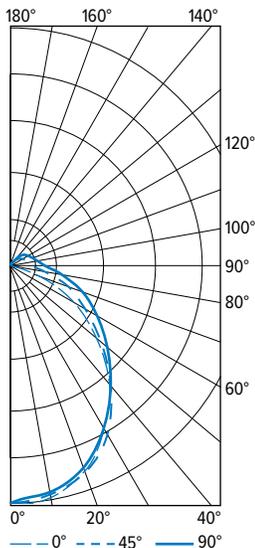
75-4-L85/835-DIM Total Luminaire Output: 8384 lumens; 59.6 Watts | Efficacy: 140.7 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2846	2846	2846	
5	2867	2838	2827	270
15	2788	2751	2743	778
25	2618	2579	2565	1192
35	2374	2326	2298	1458
45	2030	1972	1956	1526
55	1606	1553	1533	1391
65	1104	1051	1030	1052
75	571	534	522	572
85	102	114	99	142
90	9	14	9	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2240	27
	0 - 40	3699	44
	0 - 60	6615	79
	0 - 90	8381	100
	0 - 180	8383	100

75R-4-L65/835 Total Luminaire Output: 5934 lumens; 42.3 Watts | Efficacy: 140.3 lm/W | 80 CRI; 3500K CCT



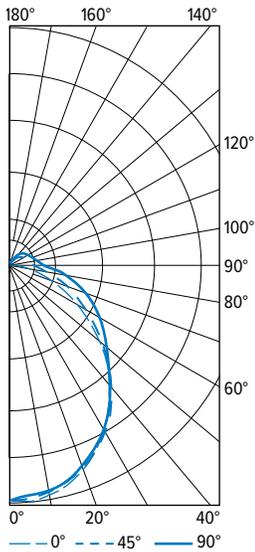
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1901	1901	1901	
5	1921	1894	1871	180
15	1834	1830	1817	515
25	1653	1690	1703	776
35	1403	1496	1547	926
45	1085	1226	1336	939
55	735	950	1090	832
65	455	690	818	653
75	196	462	568	449
85	46	294	367	277
90	6	228	298	
95	1	182	241	165
105	0	110	161	99
115	0	69	109	61
125	0	39	74	34
135	0	21	46	17
145	0	9	25	7
155	0	5	12	2
165	0	0	3	0
175	0	0	0	0
180	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1471	25
	0 - 40	2398	40
	0 - 60	4168	70
	0 - 90	5547	94
	90 - 120	325	6
	90 - 150	384	7
	90 - 180	386	7
	0 - 180	5934	100



75 LED Narrow Strip

75S-4-L65/835 Total Luminaire Output: 5934 lumens; 42.3 Watts | Efficacy: 140.3 lm/ W | 80 CRI; 3500K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	2002	2002	2002	
	5	2019	1993	1965	189
	15	1930	1913	1890	538
	25	1723	1731	1702	794
	35	1443	1473	1440	913
	45	1111	1138	1160	886
	55	771	850	946	770
	65	453	615	749	605
	75	198	397	546	412
	85	34	237	360	243
	90	0	180	286	
	95	0	169	252	164
	105	0	147	213	135
	115	0	125	188	109
	125	0	102	159	81
	135	0	71	121	52
	145	0	43	82	28
	155	0	26	46	12
	165	0	13	23	3
	175	0	0	0	0
	180	0	0	0	0

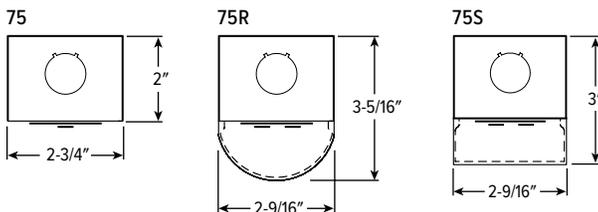
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1520	26
	0 - 40	2434	41
	0 - 60	4090	69
	0 - 90	5350	90
	90 - 120	408	7
	90 - 150	569	10
	90 - 180	584	10
	0 - 180	5934	100

ADDITIONAL CONTROL OPTIONS

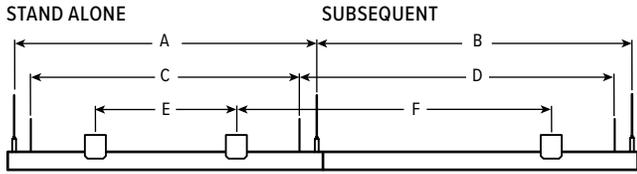
Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (Must specify 120V or 277V only)
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VDO/DSR	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VDO/DBI/LDE1	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VDO/DBI/LDE5	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

CROSS SECTIONS



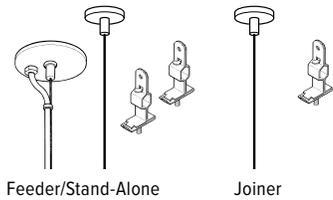
MOUNTING DETAILS



MOUNTING LENGTH

	AIRCRAFT CABLE		VBY HANGER		315 SPACER	
	A	B	C	D	E	F
2'	21-1/2"	22-1/2"	19"	22-1/2"	10"	22-1/2"
3'	32-1/2"	33-9/16"	30-1/16"	33-9/16"	21"	33-9/16"
4'	43-5/8"	44-5/8"	41-1/4"	44-5/8"	32"	44-5/8"
8'	88-3/16"	89-1/4"	85"	89-1/4"	77"	89-1/4"

STANDARD HARDWARE FOR SUSPENDED PRODUCT (Grid and Hardpan)



Notes:

- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- Electrical supply is brought into the feeder fixture, either as part of a row or as a stand-alone unit. Joiner fixtures complete the row.
- The feeder kits are standard with a 5" canopy to cover the junction box and a 2" canopy at the non-feed point. No J-box is required at non-feed points.

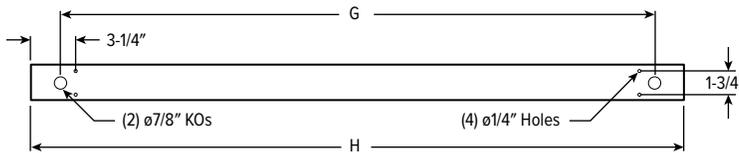
CORD FOR SUSPENDED PRODUCT

Units specified with aircraft cable require cord. Please specify cord type using ordering information below.

EXAMPLE: S2438/W					
CORD TYPE	LENGTH	# OF COND.	WIRE SIZE	COLOR	
S	24 24"	3	8	/W White	
	48 48"	4		/B Black	
	96 96"	5			

FIXTURE DETAILS

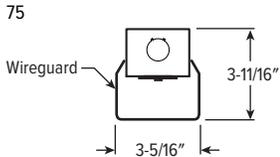
BACKVIEW



	7/8" KOs (G)	ACTUAL FIXTURE LENGTH (H)
2'	18-3/8"	22-1/2"
3'	29-1/2"	33-9/16"
4'	40-1/2"	44-5/8"
8'	85-1/8"	89-1/4"

MOUNTING ACCESSORIES DETAILS

WG-75



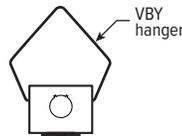
75R



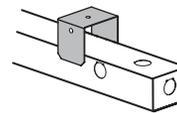
75S



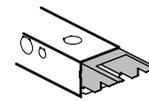
VBY



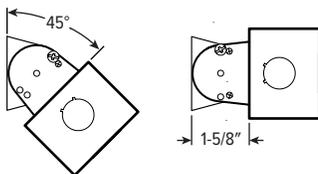
315



RA-75



45AMB



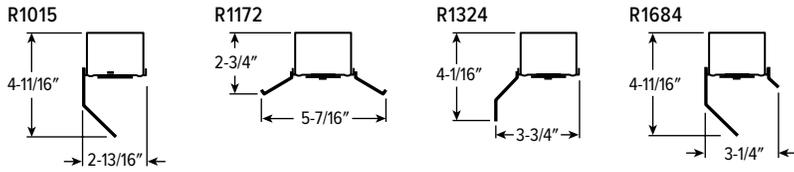
QUICK CONNECT OPTIONS

Note: Quick connect wiring required for row mounting. Length restrictions may apply, consult product builder at hew.com/product-builder.

DESIGNATION	NUMBER OF WIRES (EXCLUDING GROUND)	WIRE COLORS	WIRE COLOR/POWER SUPPLY FACTORY CONNECTIONS	TYPICAL USE
C2B	3	White, Black, Red	White, Black	Alternating Circuits
C2BR	3	White, Black, Red	White, Black, Red	ON/OFF Switching (DRV) or Line Voltage dimming (DIM LINE) when equipped w/EM Power Supply (EM/10W)
C2R	3	White, Black, Red	White, Red	Alternating Circuits
C2BW/RV	5	White, Black, Red, Gray, Green	White, Black/Red, Gray	0-10V 4-wire Low Voltage Dimming (DIM)



SPECIAL REFLECTORS



Reflectors are ordered separately, only available with 75, cannot be used with wireguard accessories.
Example: R1172-4-75LED REFL

FINISH OPTIONS



For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.

OCCUPANCY SENSOR DETAILS

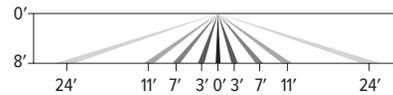
ORDERING EXAMPLE: OCCWS FSP-211-L2-120/277

FEATURES

- Fully adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for up to 200,000 on/off cycles.
- Hold-off setpoint with automatic calibration option for convenience and added energy savings.
- Adjustable via handheld wireless configuration tool.
- Adjustable time delay and cutoff delay.
- Factory set to 10% dimming at 5 minutes, cutoff at 1 hour.

LENS COVERAGE PATTERNS

L2 Coverage at 8' mounting height: ø48'



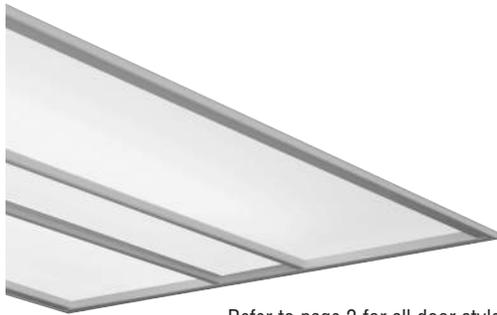
REMOTE CONTROLLER



FSIR-100 Remote controller for occupancy sensor

Initial setup and subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. Please specify quantity required per project.

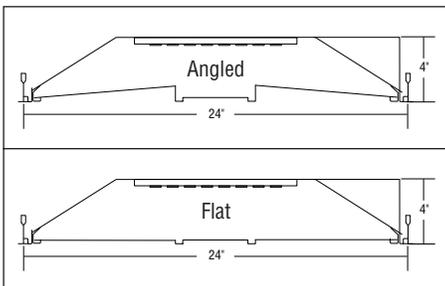
Visit www.wattstopper.com for more information.



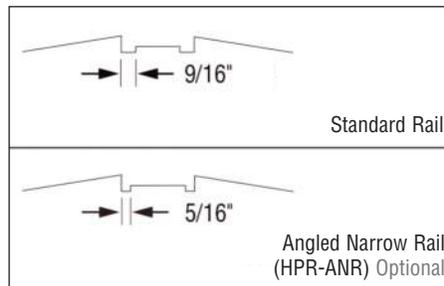
Refer to page 2 for all door styles

DESCRIPTION

HPR LED is a highly efficient recessed luminaire delivering excellent visual comfort and outstanding performance. Advanced optical design makes HPR LED a powerful solution for low-ceiling applications and eliminates the shadows common to other LED recessed products. This Product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Declared** status.



DIMENSIONS



NARROW RAIL OPTION

Available in angled door style with the same center optic choices. The optional narrow rails are approximately 5/16" wide. The standard rails are approximately 9/16" wide.

Date

Project

Type

Comments

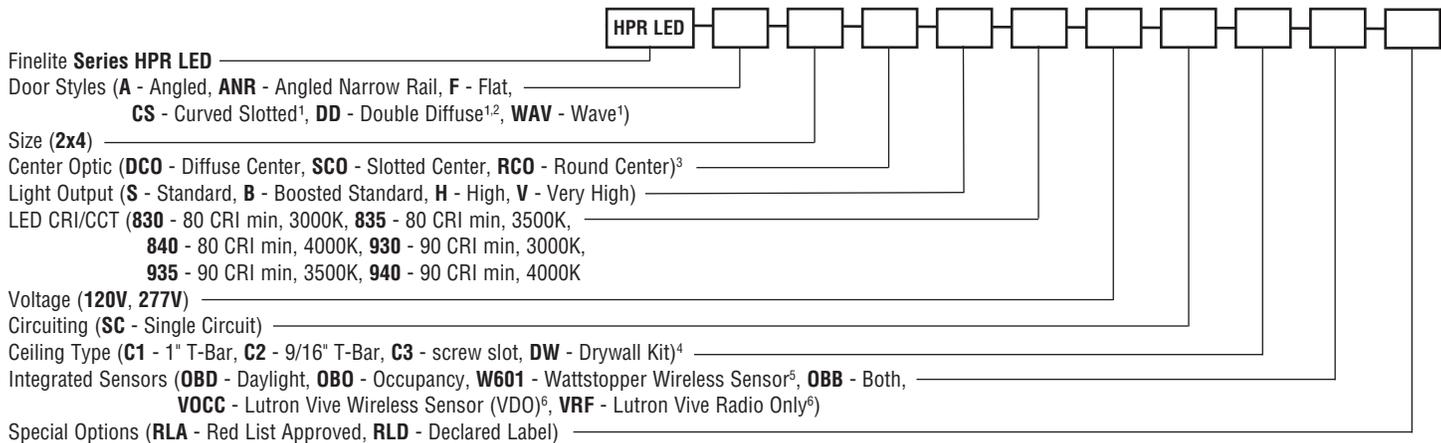


100% SERVICEABLE FROM BELOW

The replaceable light engine and driver are easy to access from below the ceiling.

ORDERING GUIDE

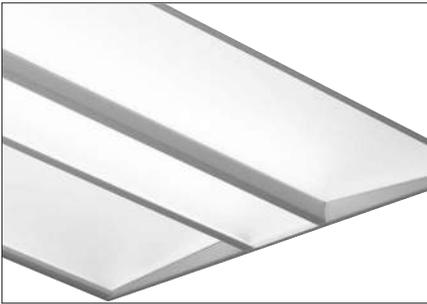
Sample Number: HPR LED - A - 2x4 - DCO - S - 835 - 277V - SC - C1 - OBO - RLA



¹ Curved Slotted, Double Diffuse and Wave door not available with Center Optic options
² Double Diffuse not available with sensors
³ Only available with Angled (A), Angled Narrow Rail (ANR) and Flat (F) door options
⁴ Surface Mount available
⁵ LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected. LMFS-601 w/ Dali driver, only 1 driver can be connected.
⁶ Lutron Vive Integrated Sensors require a DALI driver

A brand of **legrand**

DOOR STYLES



A - Angled
ANR - Angled Narrow Rail

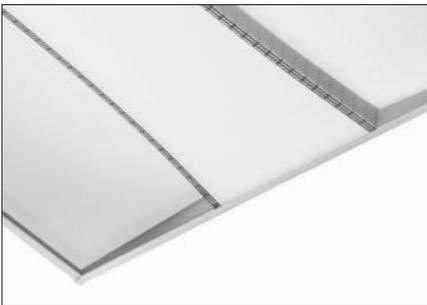


F - Flat

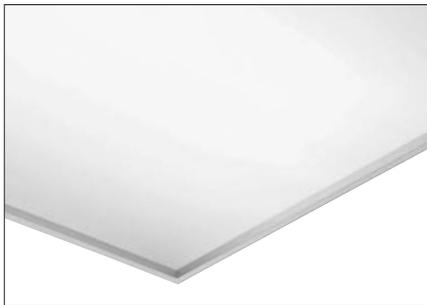


WAV - Wave

DOOR STYLES



CS - Curved Slotted



DD - Double Diffuse

CENTER OPTICS



DCO - Diffuse Center



SCO - Slotted Center

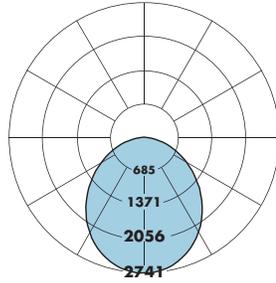


RCO - Round Center

DCO, SCO, and RCO are only available on Angled (A), Angled Narrow Rail (ANR), and Flat (F) doors.

PHOTOMETRY

HPR LED-A-2x4-DCO-V
Very High Output - Angled Rail
Efficacy: 127 lumens per watt
Total luminaire output: 6979 Lumens
55.1 Watts
Peak Candela Value: 2741 @ 0°
CCT: 3500K
ITL LM79 Report 85145



CANDLEPOWER SUMMARY						
	0.0	22.5	45	67.5	ACROSS	Flux
0	2741	2741	2741	2741	2741	
5	2730	2728	2728	2727	2727	259
10	2685	2684	2683	2682	2678	
15	2613	2607	2609	2605	2602	735
20	2511	2506	2502	2498	2498	
25	2380	2374	2371	2366	2367	1091
30	2223	2216	2213	2209	2211	
35	2043	2036	2033	2030	2033	1271
40	1845	1838	1836	1834	1837	
45	1635	1628	1627	1626	1630	1256
50	1417	1412	1412	1410	1413	
55	1200	1195	1196	1195	1187	1069
60	986	984	984	978	974	
65	780	778	774	766	761	766
70	582	583	576	569	565	
75	401	400	393	388	389	420
80	239	236	232	229	229	
85	103	100	97	91	89	111
90	0	0	0	0	0	

Angled (A) and Flat (F) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B*	H*	V**
3772	4742	5416	6979
Power, 3500K, 80 CRI (Watts)			
S*	B*	H*	V**
27.0	35.2	40.6	55.1
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B*	H*	V**
140	135	135	127

* Family Correlation based on 3500K Very High Output (V) test - 120V.
** Based on source ITL report: 85145

Angled Narrow Rail (ANR) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B*	H*	V ^x
3680	4626	5283	6808
Power (Watts)			
S*	B*	H*	V ^x
26.9	35.1	40.5	55.0
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B*	H*	V ^x
137	132	130	124

* Family Correlation based on 3500K Very High Output (V) test - 120V.
** Based on source ITL report: 85151

**S - Standard Output, B - Boosted Standard Output,
H - High Output, V - Very High Output**

Lumen Adjustment Factors - 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors - 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

**SAMPLE LUMEN
ADJUSTMENT CALCULATION**

High Output (H) Angled (A) & Flat (F)
4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output =
5416 lm x 0.789 = 4273 lm

$$\text{Efficacy} = \frac{4273 \text{ lm}}{40.6 \text{ W}} = 105 \text{ lm/W}$$

** Correlation based on ITL report: 85145

Wave (WAV) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B*	H*	V†
3821	4804	5486	7069
Power, 3500K, 80 CRI (Watts)			
S*	B*	H*	V†
27.0	35.2	40.6	55.1
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B*	H*	V†
142	136	135	128

* Family Correlation based on 3500K Very High Output (V) test - 120V.
† Based on source ITL report: 85837

Curve Slotted (CS) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B*	H*	V‡
3569	4486	5124	6602
Power, 3500K, 80 CRI (Watts)			
S*	B*	H*	V‡
27.0	35.2	40.6	55.1
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B*	H*	V‡
132	127	126	120

* Family Correlation based on 3500K Very High Output (V) test - 120V.
‡ Based on source ITL report: 86020

Double Diffuse (DD) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B*	H*	V‡
3076	3867	4417	5691
Power, 3500K, 80 CRI (Watts)			
S*	B*	H*	V‡
27.0	35.2	40.6	55.1
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B*	H*	V‡
114	110	109	103

* Family Correlation based on 3500K Very High Output (V) test - 120V.
‡ Based on source ITL report: 85156

Lumen Adjustment Factors - 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors - 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

S - Standard Output, **B** - Boosted Standard Output,
H - High Output, **V** - Very High Output

SPECIFICATIONS

CONSTRUCTION: Die-formed 20-gauge cold-rolled steel housing. All components are hard-tooled to tolerances of +/- 0.010". UV stabilized weather-strip pile gasket with polypropylene backing. Hinged door frame assembly provides easy access to light arrays and driver compartment for servicing from below. Seismic brackets are integrated into the luminaire assembly. Additional wire entrances are positioned on the ends of the housing to allow easy wiring access for the installer.

REFLECTORS: Die-formed 20-gauge cold-rolled steel reflectors are finished in 96LG high reflectance matte white powder coat paint.

AIR RETURN: Refer to 2x4 Air Return Tech Sheet for more information.

OPTICAL SYSTEM: Components include diffuser panels and a central optic element held in place with a frame constructed from die-formed cold-rolled steel. The diffusers are UV-stabilized and impact-resistant frosted virgin acrylic, 0.120" thick. They are either angled toward the central optic or parallel to the ceiling plane. The standard center rails are approximately 9/16" wide. Optional narrows rails are approximately 5/16" wide. Optional wave door includes frosted acrylic panel that undulates from side to side.

DOUBLE DIFFUSE: Visible diffuser: UV-stabilized and impact-resistant frosted virgin acrylic, 0.120" thick. Inner diffuser: 0.120" thick with 60% round perforations white/white.

DOOR STYLE: Curved Slotted (CS) includes perforated rails that slope inward and a diffuse frosted acrylic center optic.

CENTER OPTIC OPTIONS: Only available with Angled (A), Angled Narrow Rail (ANR), and Flat (F) door styles.

Diffuse Center Optic (DCO): UV-stabilized and impact-resistant frosted virgin acrylic.

Slotted Center Optic (SCO): Die-formed cold-rolled steel panel with a 1/16" x 1/2" rectangular hole pattern. Virgin acrylic overlay.

Round Center Optic (RCO): Die-formed cold-rolled steel panel with precision-punched 3/32" round hole pattern arranged in staggered formation. Virgin acrylic overlay.

LIGHT OUTPUT: Four lumen packages available, Standard (S), Boosted Standard (B), High (H), and Very High (V). A separate chart summarizes lumen distribution and wattage. Light engines are replaceable.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

DRIVER: Replaceable 120V/277V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%- 100%. Dimming to 1% available, consult factory. Driver is fully accessible from below the ceiling. Power Factor: 0.9. Total Harmonic Distortion (THD): <20%. Expected driver lifetime: 100,000 hours.

LUTRON DRIVER OPTIONS: LUTES1 (Hi-lume 1% EcoSystem with Soft-On, Fade to Black dimming (LDE1 series)); LUT2W (Hi-lume 1% 2-wire, 120V forward phase dimming (LTEA series)); Contact factory for availability of discontinued Lutron drivers, L3DA-3-wire and L3DA EcoSystem.

ELECTRICAL: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery. Chicago Plenum option. Factory-choice low-profile backup battery available. Bodine BSL722 battery pack also available. Backup batteries deliver 2305 lumens. One quarter of the 2x4 will be illuminated in emergency mode.

  **INTEGRATED SENSORS:** Integrated PIR (Passive Infrared) Occupancy (OBO) or Daylight Sensors (OBD) available with Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options.

MOUNTING: Standard flange design works with most lay-in ceiling types. Integral pry-out tabs secure the luminaire to the ceiling grid from above. Tie-in locations for tie-wire on all corners. Consult local code for appropriate tie-wire recommendations. Drywall Kit available. Surface mount and air return versions available; refer to separate tech sheets.

FINISH: Housing and door assembly painted with 96 LG high reflectance matte white powder coat paint. Optional adder: Anti-microbial paint. Contact factory.

FEED: Optional whips (with flex connectors) supplied in a maximum of 11' lengths. Lead Wires

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 916, 1598, 8750, 924 in the U.S.A. and CAN/CSA C22.2 No. 205, 250, and 141 in Canada. In accordance with NEC Code 410.73 (G), this luminaire contains an internal driver disconnect. Damp Location. IC-rated. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2011/65/EU. Simply add - RLF (Red List Free) or - RLD (Declared) to your part number.

WEIGHT: 33 lbs maximum.

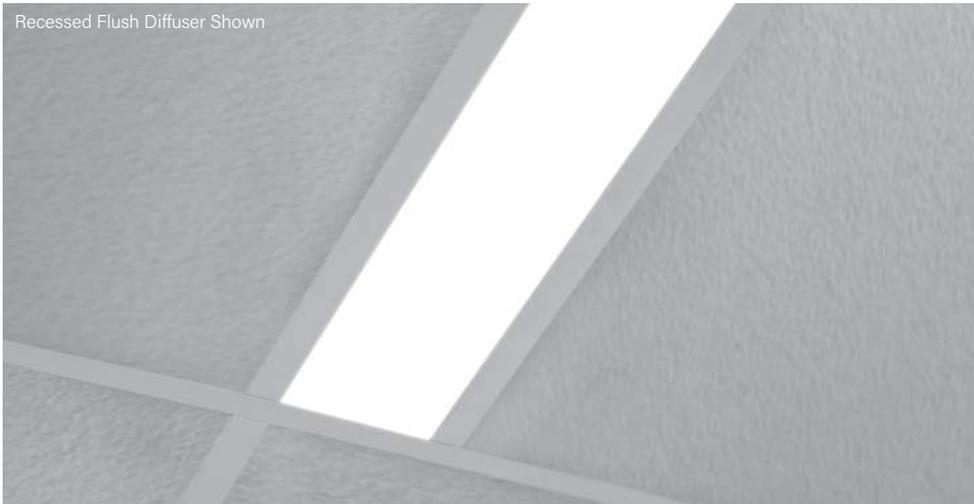
DLC QUALIFIED: Contact factory

WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

* LutVDO & LutVRF can be provided with 1% DALI Sensor Ready Driver (Osram Dexas), 5% DALI Sensor Ready Driver (Philips SR DALI) or any Lutron EcoSystem 1% or 5% LED driver. Customer to specify driver required.

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed



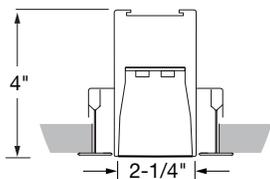
High Performance 2" Aperture is a patented, linear LED luminaire family. HP-2 delivers excellent performance using an advanced optical design and mid-power LEDs. Achieving 90% of initial light output at 100,000+ hours and backed by a 10-year performance-based warranty on all standard components.

This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

Note: see page 6 for all aesthetic options

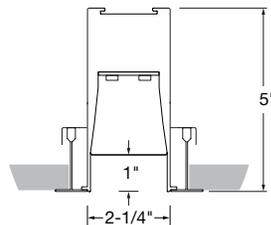
CROSS SECTIONS

Recessed



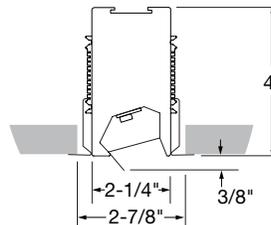
Flush Downlight Diffuser (standard)

Regressed



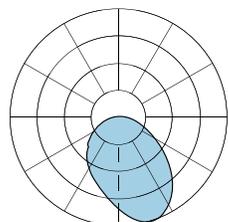
Flat Diffuser with 1" Regressed

Wall Wash Recessed

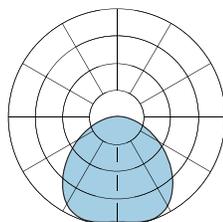


Kicker (standard)

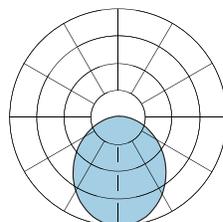
OPTIC OPTIONS



Downlight Asymmetric Optic (DAO)



Downlight Spread Optic (DSO)



Standard Downlight Flush Optic (F)

ALSO AVAILABLE IN



Pendant (D, ID, I)



Wall Mount (WM)



Surface Mount (SM)



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Ordering Guide Example: HP - 2 - R - D - 36' - S - 835 - F - 96LG - 120 - SC - FC-10% - FA50 - C1 - FE - SW - LGD18W - OBO - CP

BODY TYPE				OUTPUT AND LED TYPE		
Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Run	Downlight Output (Flush)	LED CRI/CCT
HP - High Performance	2	R - Recessed R RG - Recessed Regressed (Wall Wash not available)	D - Direct WW-D - Wall Wash Direct	Minimum 2' section length. Increments accurate to 1/16" (±1/32"), standard. 12' maximum section length.	S - Standard (336 lm/ft) B - Boosted (423 lm/ft) H - High (639 lm/ft) V - Very High (822 lm/ft) TL - Tailored: _____lm/ft* Lumen provided above are for Flush lens only, see pg. 12 for WW lumens * Specify Tailored lm/ft of outputs between Standard (S) and Very High (V). Consult factory for tailored lumen output outside of this range.	830 - 80 CRI, 3000K 835 - 80 CRI, 3500K 840 - 80 CRI, 4000K 930 - 90 CRI, 3000K 935 - 90 CRI, 3500K 940 - 90 CRI, 4000K 8TW - 80 CRI, Tunable White 9TW - 90 CRI, Tunable White

MECHANICAL/OPTICAL OPTIONS		ELECTRICAL OPTIONS			
Downlight	Reflector System	Voltage	Circuiting ²		
F - Flush (standard) ^{8,9} DL - 1" Drop Down Lens ⁸ RG-D - Flat Diffuser with 1" Regress ^{1,8} RG-WCB - White Cross Blade Baffle ^{1,8} RG-LHE - Hollowed Ellipse Louver ^{1,8} RG-LHC - Hex Louver ^{1,8}	DAO-L - Downlight Asymmetric Left ^{4,8} DAO-R - Downlight Asymmetric Right ^{4,8} DSO - Downlight Spread Optic ^{4,8} K - Kicker for Wall Wash only (standard) ⁵ FO - Fully Open for Wall Wash only	96LG - 96 Low Gloss White SW - Signal White for Wall Wash only	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage (OTI only)	SC - Single Circuit* One single circuit in a run MC - Multi-Circuit* More than one switch leg or zone. Factory shop drawings required * Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)	

ELECTRICAL OPTIONS			
Driver Selection			
0-10V Driver Options FC-10% - 0-10V 10% (standard) FC-1% - 0-10V 1% OTI-10% - EldoLED OTI, 0-10V 10% ³ OTI-1% - EldoLED OTI, 0-10V 1% ³ ELD-10V-0% - EldoLED SOLOdrive, 0-10V 0.1% 10V-TW-10% - EldoLED OTI, 0-10V 10% (Tunable White) ³	DALI Driver Options FC-DALI-1% - DALI 1% DXL-DALI-1% - EldoLED Dexal, 1% ELD-DALI-0% - EldoLED SOLOdrive, 0.1% ELD-DALI-TW - EldoLED DUALdrive LightShape, 0.1% (Tunable White)	DMX Driver Options ELD-DMX - EldoLED POWERdrive, 0.1% ELD-DMX-TW - EldoLED POWERdrive, 0.1% (Tunable White)	Lutron Driver Options LUT-ES1 - Lutron, Ecosystem 1% LUT-TW - Lutron LD2 Dalı-2 1% (Tunable White)

See Page 3 for additional driver options and details

MOUNTING OPTIONS		OTHER OPTIONS	
Ceiling Hardware Type	Endcap Style	Finish	
C1 - 15/16" T-Bar C1T - 15/16" Tegular C2 - 9/16" T-Bar C2T - 9/16" Tegular C3 - Screw Slot	C3F - Flush Screw Slot SF - Spackle Flange VF - Visible Flange TZ4 - Tech Zone 4" _____ (C1, C2, C2T, C3, C3F)	FE - Flat Endcap (standard) SW - Signal White (standard) FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code ⁷ _____	

OTHER OPTIONS		
Emergency Style (Optional)	Integrated Sensor (Optional) ⁸	Special Options (Optional)
LGD18W - Legrand 18W Brand Battery Back-up LGD10W - Legrand 10W Brand Battery Back-up EM/GEN - Emergency to Generator NL - Night Light BSL310LP - Bodine Battery Back up Low Profile GTD - Generator Transfer Device ALCR - Automatic Load Control Relay	OBO - Occupancy ⁹ OBD - Daylight ⁹ W601 - Wattstopper Wireless Sensor ¹⁰ OBE - Enlighted ¹¹ REE - Remote Enlighted ¹² CLM - Encelium RF SLM - Encelium Sensor	AOCC-W - Lutron Athena Sensor (Device Color White) ¹³ AOCC-B - Lutron Athena Sensor (Device Color Black) ¹³ ARF-W - Lutron Athena RF (Device Color White) ¹³ ARF-B - Lutron Athena RF (Device Color Black) ¹³ VOCC - Lutron Vive Wireless Sensor (VDO) ¹⁴ VRF - Lutron Vive Radio Only ¹⁴

¹ Recessed Regressed straight run only
² Contact factory for switching options
³ Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO)
⁴ Not available with Regressed or Curves
⁵ Kicker standard in Signal White. Customer Custom color kickers have a surcharge
⁶ B & V outputs only
⁷ 20 business days lead time for color
⁸ Minimum fixture length with a sensor is 3ft.
⁹ Not available with Wall Wash
¹⁰ LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected. LMFS-601 w/ Dalı driver, only 1 driver can be connected.
¹¹ Enlighted components installed by Finelite, provided by others
¹² Enlighted for Wall Wash fixtures. Enlighted Control Unit & Sensor Cable installed for Remote mounting sensor.
¹³ 0-10V Drivers - AOCC up to 10 drivers may be connected; ARF up to 40 drivers may be connected DALı Drivers - AOCC & ARF up to 4 drivers can be connected.
¹⁴ Lutron Vive Integrated Sensors require a DALı driver
¹⁵ Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SUPPLEMENTARY DRIVER PAGE

0-10V Driver Options

FC-10%	Factory Choice, 0-10V 10% Dimming (Linear)
FC-10%-DTO	Factory Choice, 0-10V 10% Dimming, Dim-to-Off (Linear)
FC-1%	Factory Choice, 0-10V 1% Dimming (Linear)
FC-1%-DTO	Factory Choice, 0-10V 1% Dimming, Dim-to-Off (Linear)
ELD-10V-0%	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
ELD-10V-1%	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
10V-TW-10%	EldoLED OTi, 0-10V 10% Dimming, Tunable White (Linear)
10V-TW-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, Tunable White (Linear)
OTi-10%	EldoLED OTi, 0-10V 10% Dimming (Linear)
OTi-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
OTi-1%	EldoLED OTi, 0-10V 1% Dimming (Linear)
OTi-1%-DTO	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

DALI Driver Options

FC-DALI-1%	Factory Choice, DALI 1% Dimming (Logarithmic)
DXL-DALI-1%	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
ELD-DALI-0%	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
ELD-DALI-1%	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)
ELD-DALI-TW	EldoLED DUALdrive Light Shape, DALI 0.1% Dimming, Tunable White (Logarithmic Dimming, Linear CCT Control)

DMX Driver Options

ELD-DMX	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
ELD-DMX-16	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)
ELD-DMX-TW	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (8 Bit, 2CH - CH1 Warm / CH2 Cool) (Linear)
ELD-DMX-TW16	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (16 Bit, 4CH - CH1, 2 Warm / CH3, 4 Cool) (Linear)

Lutron Driver Options

LUT-ES1	Lutron, Ecosystem 1% Dimming
LUT-TW	Lutron LD2 Dali-2 1%, Tunable White

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SPECIFICATIONS

BODY TYPE

CONSTRUCTION: Precision-cut 6063-T6 extruded aluminum body. Internal joiner system and plug-together wiring are standard.

LENGTHS: Any length, 2' minimum, in increments down to 1/16th" ($\pm 1/32"$). 12' maximum section length. Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**), and White Cross Blade Baffle (**WCB**) are available in 1' increments.

MITERED CORNERS ¹ : Illuminated corners of greater than 60° and less than 180° in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, Regressed Diffuser, or White Cross Blade Baffle ². Corners not available with Wall Wash (**WW-D**), Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**) or 1" Drop Down Lens. Contact factory for Double miters using the White Cross Blade Baffle. Consult factory for tailored lighting options.

OUTPUT AND LED TYPE

LIGHT OUTPUT: Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). For lengths 3' and greater, the uplight and downlight can be specified with different lumen packages and dual controls. For Tailored Outputs outside of range from Standard (**S**) to Very High (**V**), consult factory. Light engines are replaceable.

MECHANICAL/OPTICAL OPTIONS

DOWNLIGHT OPTION: 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Available with Flush (**F**), Bottom Glow (**BG**), 1" Drop Down Lens (**DL**), White Cross Blade Baffle (**WCB**) ^{3,4}, Ellipse Louver (**LHE**) ³, Hex Louver (**LHC**) ³, Downlight Asymmetric Optic (**DAO**) ⁵, Downlight Spread Optic (**DSO**) ⁵, and Regressed downlight diffusers (**RG**) ³. 1" Drop Down Lens made of highly efficient acrylic. Available with a solid endcap or an endcap with a diffuse filler to continue the luminous aesthetic. Downlight Spread & Downlight Asymmetric Optics are extruded lenses with a subtle ribbed appearance providing a batwing or asymmetric distribution for improved optical performance. Consult factory for more tailored lumen outputs.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

REFLECTORS: Die-formed 20-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint. The standard Semi-Specular Aluminum (**SSA**) Kicker (**K**) reflector delivers light high on the vertical surface. The Kicker reflector can be easily removed for open distribution (**FO**).

ELECTRICAL OPTIONS

STATIC WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed wire controlling uplight and downlight together (power and dimming). Specify dual feed wires for independent control of uplight and downlight. 14-gauge feed wire used when luminaire current exceeds 5 amps.

TUNABLE WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when luminaire current exceeds 5 amps. DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

0-10V:

- One 18-gauge / 3-conductor power
- One 18-gauge / 4-conductor for dimming and controls

Dali:

- One 18-gauge / 5-conductor power and controls

DMX:

- One 18-gauge / 3-conductor power
- One DMX feed

STATIC WHITE DRIVER: Replaceable 120V, 277V, and 347V constant current reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%- 100% standard. Dimming to 1% available. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

– **Power Factor:** ≥ 0.9

– **Total Harmonic Distortion (THD):** <20%

– **Expected driver lifetime:** 100,000 hours

LUTRON DRIVER OPTIONS:

LUT-ES1 - Hi-lume 1% EcoSystem with Soft-On, Fade-to-Black dimming (LDE1 series).

TUNABLE WHITE DRIVER: Replaceable LED driver. Driver is accessible from below the ceiling. 120V and 277V.

– **Power factor:** ≥ 0.90

– **Total Harmonic Distortion (THD):** <20%

– **Dimming Range:** 100%-10%

– **Expected driver lifetime:** 100,000 hours

LUTRON TUNABLE WHITE DRIVER OPTION:

LUT-TW - Lutron LD2 Dali-2 1%, Tunable White.

¹ Not available with Wall Wash

² White Cross Blade (WCB) baffles not available with custom angles. Available in 90 degrees only

³ Recessed Regressed straight run only

⁴ White Cross Blade Baffle (WCB) currently not advisable for drywall

⁵ Not available with Regressed or Curves

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SPECIFICATIONS

MOUNTING OPTIONS

HANGING HARDWARE:

- **Recessed T-Bar:** Standard bracket design works with most lay-in ceiling types. Brackets secure luminaire to the ceiling grid from above. Tie-in T-Bar brackets connect the luminaire to the T-Bar for securing to structure. Consult local codes for tie-wire recommendations.
- **Recessed Spackle Flange:** Drywall surfaces (walls or ceilings): 1/4" - 20 stud and nut (provided by others). Mounted with three equidistant suspension points.

TUNABLE WHITE DMX HANGING HARDWARE: For grid ceiling applications the dual GridBox™ mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5' (standard), 12', and 30'.

TUNABLE WHITE DMX INTERCONNECTION CABLES: Luminaires are prewired with plug-and-play interconnected cables to support easy plug-together joining of fixture runs. DMX to RJ45 adapters and an RJ45 terminator for every 32 DMX drivers are included.

OTHER OPTIONS

ENDCAPS: Flat endcaps (**FE**) at each end of run add 1/16" to each end of luminaire. Drop Down Lens Illuminated Endcap (**DE**) includes diffuse element to continue luminance of drop lens.

EMERGENCY STYLE: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery.

Backup Battery		
	Legrand 18W	Legrand 10W / Bodine BSL310LP
HP2-R-D		
Min. Housing Length	8*	4**
EM Lumen Output	1608	956
EM Section Illuminated	2'	2' or 4'
HP2-R-WW-D		
Min. Housing Length	8*	4**
EM Lumen Output	1500	891
EM Section Illuminated	4'	4'

* Minimum fixture housing length for battery pack approved without sensor. ** Exception: 5' not available, 6'+ okay. The lumens are based on 835. For other CCT/CRI, refer to the Lumen Adjustment Factor table on page 11.

Bodine GTD and Legrand ALCR Min. Length	
Configuration	Min Length
Generator	6'
Generator + OCC	8'
Daylight	6'
Generator + Daylight	8'

TUNABLE WHITE ELECTRICAL OPTIONS⁶:

TW Driver Options

- **0-10V:** EM/GEN, GTD or Battery BackUp
- **DMX:** Battery Back Up
- **DALI:** EM/GEN, GTD or Battery Back Up
- **LUTRON:** EM/GEN, GTD or Battery Back Up

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) Occupancy (**OBO**) or Daylight Sensors (**OBD**) available with Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options. Minimum fixture length with a sensor is 3ft. The default location for the Connected Lighting Module (**CLM**) will be on the topside of the fixture for all mounting types except for Surface Mount (**SM**). In SM fixtures the CLM will be located on the direct side of fixture housed in a bracket that is flush with the direct lens.

FINISHES: Finelite Signal White (**SW**) powder coat, Finelite Black (RAL 9005) with semi gloss fine texture (**FB**), and Satin Aluminum (**SA**) are standard. Optional Adder: 179 RAL colors⁷ are available.

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 - PoE options available on request. These fixtures are rated for Damp Location. IC Rated. HP-2 can be used to comply with 2016 Title 24, Part 6 (JA8); high efficacy LED light source requirements. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/863. Consult factory for tailored lighting options. Finelite makes the specification process easy when putting healthier products on your projects. Simply add - **RLA** (Red List Approved) or - **RLD** (Red List Declared) to your part number.

WEIGHT⁸: R - 2.3 lb/ft; WW-R - 2.9 lb/ft

WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

⁶ Consult Finelite for Generator Transfer Device and Battery Backup fit

⁷ 20 business days lead time for color

⁸ Excludes Battery Backup and Generator Transfer Device weight

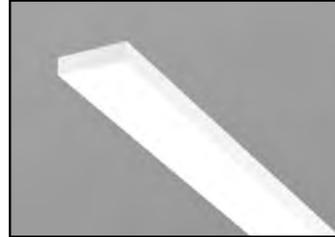
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

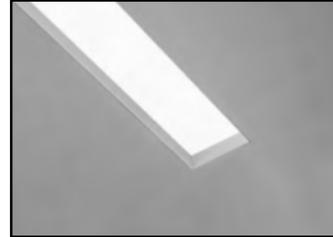
AESTHETIC OPTIONS



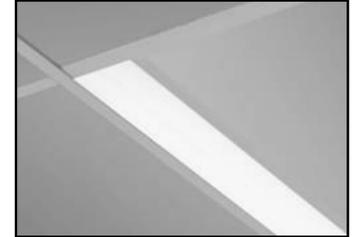
Flush Diffuser (**F**)



1" Drop Down Lens (**DL**)



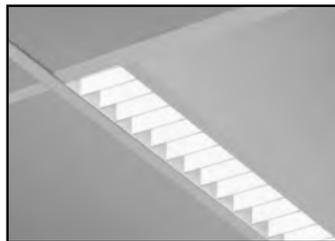
Flat Diffuser with 1" Regressed (**RG-D**)



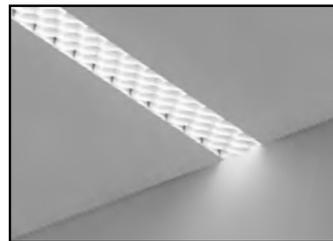
Downlight Asymmetric Optic (**DAO**)¹
Externally flush



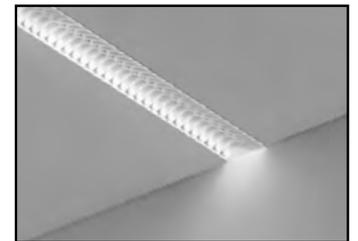
Downlight Spread Optic (**DSO**)¹
Externally flush



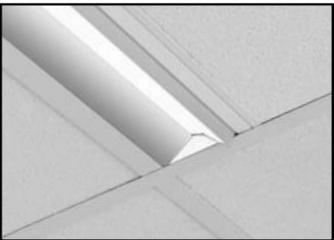
White Cross Blade Baffle² (**RG-WCB**)



Hex Louver² (**RG-LHC**)



Hollowed Ellipse Louver² (**RG-LHE**)



Kicker (**K**) - Wall Wash only

¹ With a subtle ribbed appearance providing specialized distribution

² Regressed only. Not available with Wall Wash

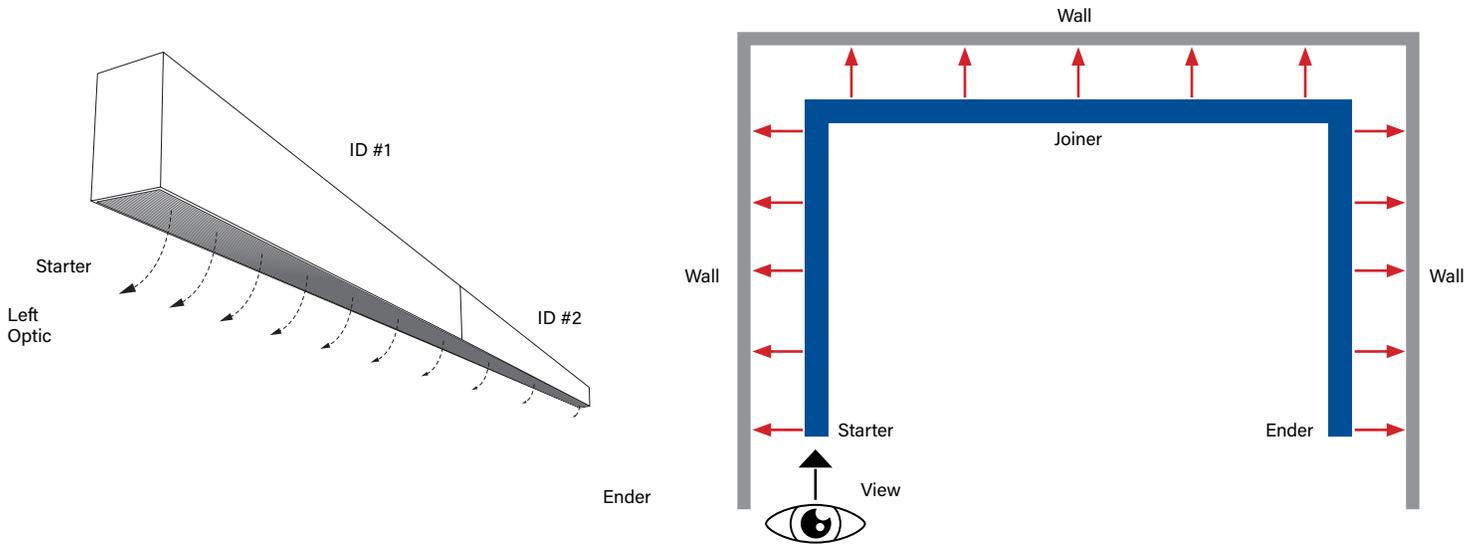
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Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

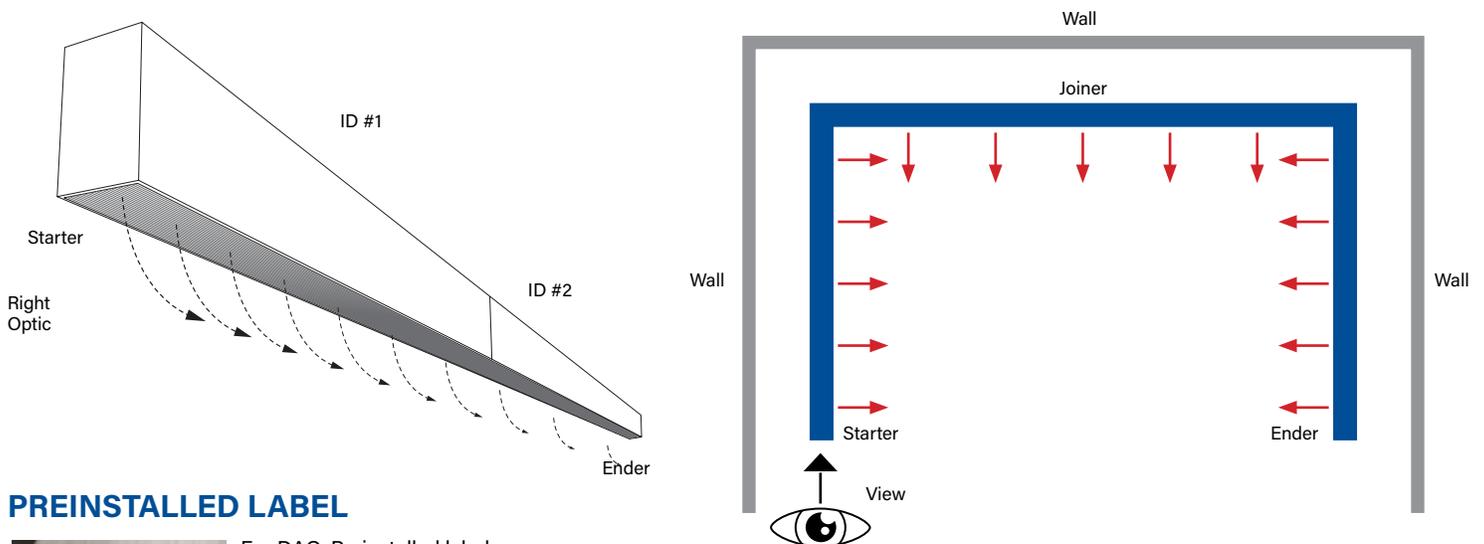
DOWNLIGHT ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying DAO-L distributes light to the left or DAO-R distributes light to the right. For proper orientation: view luminaire from starter end when specifying the direction of the Downlight Asymmetric optic.

Downlight Asymmetric Optic Left (DAO-L)



Downlight Asymmetric Optic Right (DAO-R)



PREINSTALLED LABEL



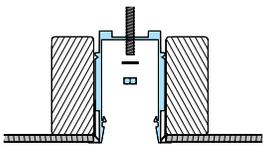
For DAO, Preinstalled label on diffuser shows direction of light. Remove after installation.

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Type:	Project:	
Ordering Info:		

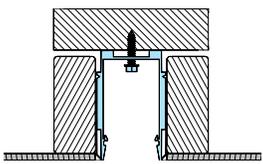
High Performance 2" Aperture (HP-2) Recessed

HARD CEILING MOUNTING OPTIONS

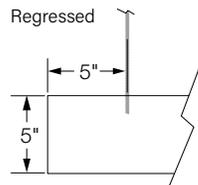
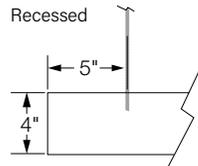
Threaded Rod Option



Screw Mount Option

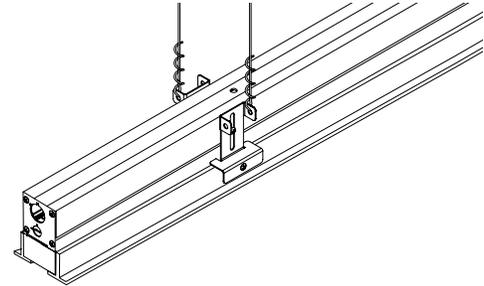


Mounting Location for Securing to Structure



Two mounting options: threaded rod and screw mounting options. Mounting locations are located on each end of the luminaire. Mounting location is 5" away from each end of luminaire.

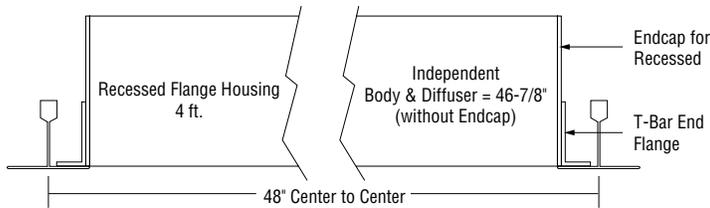
T-BAR INSTALLATION



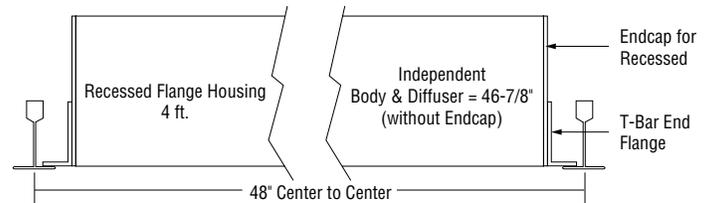
HP-2 R for T-Bar installations comes standard with a splice plate at the end of the luminaire. Mounting brackets (supplied) secure the luminaire to T-Bar and provide support to structure location. All even foot length (2, 4, 6, ...) luminaire runs are reduced in length by an appropriate amount to fit within typical 2x2 and 2x4 T-Bar grid systems. For uncommon T-Bar systems please consult factory.

GRID LENGTH DETAIL - 4' EXAMPLE

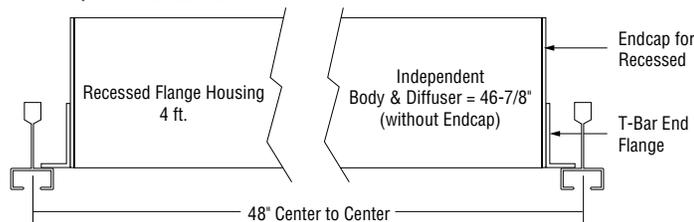
15/16" T-Bar



9/16" T-Bar

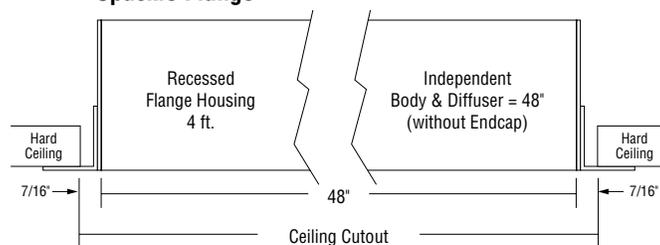


9/16" Screw Slot

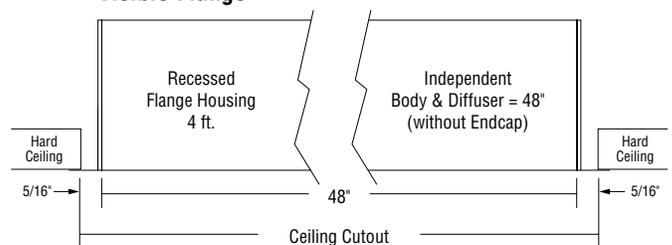


HARD CEILING LENGTH DETAIL - 4' EXAMPLE

Spackle Flange



Visible Flange

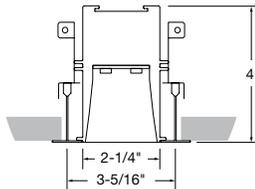


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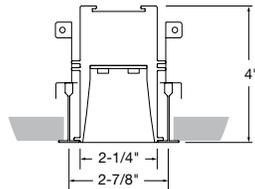
High Performance 2" Aperture (HP-2) Recessed

RECESSED MOUNTING TYPES - T-BAR

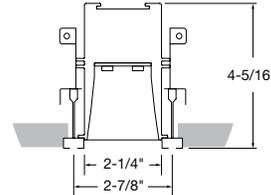
Rough-In Dimensions



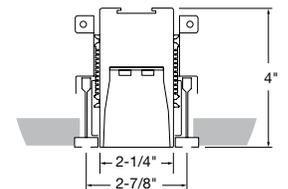
15/16" T-Bar (C1)



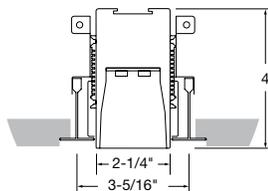
9/16" T-Bar (C2)



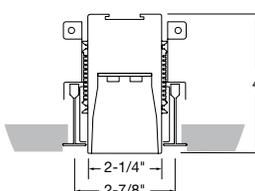
Standard Screw Slot (C3)



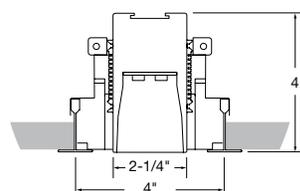
Flush Screw Slot (C3F)



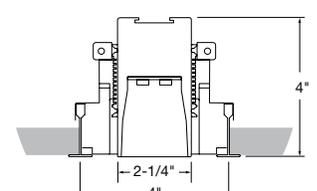
15/16" Tegular (C1T)



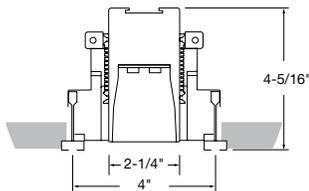
9/16" Tegular (C2T)



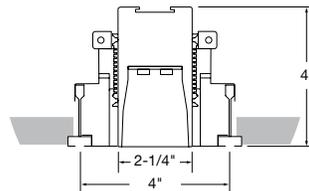
Tech Zone 4" (TZ4)
15/16" T-Bar (C1)



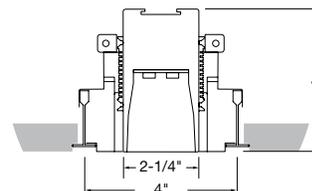
Tech Zone 4" (TZ4)
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)
Standard Screw Slot (C3)

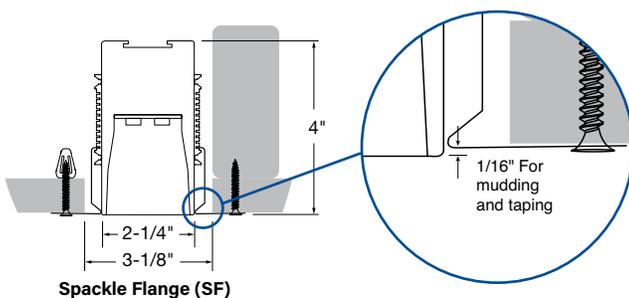


Tech Zone 4" (TZ4)
Flush Screw Slot (C3F)

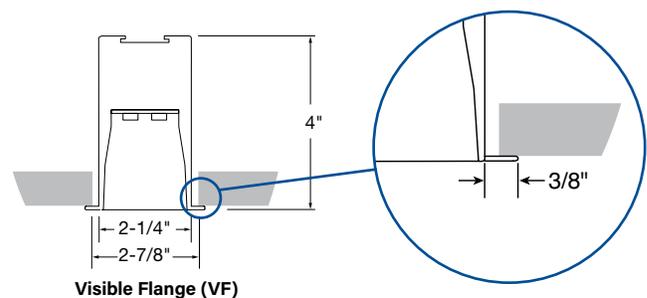


Tech Zone 4" (TZ4)
9/16" Tegular (C2T)

RECESSED MOUNTING TYPES - CUTOUT DIMENSIONS



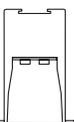
Spackle Flange (SF)



Visible Flange (VF)

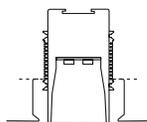
HOUSING

Version 1



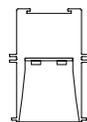
Ceiling Option VF

Version 2



Ceiling Options
C1T, C2T, C3F, SF, TZ4

Version 3



Ceiling Options
C1, C2, C3

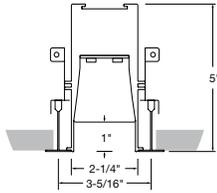
Note: +/- 1/16"

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Type:	Project:	
Ordering Info:		

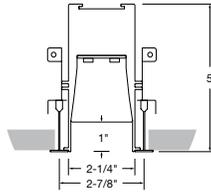
High Performance 2" Aperture (HP-2) Recessed

REGRESSED MOUNTING TYPES - T-BAR

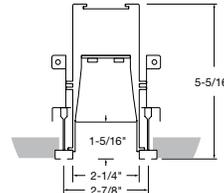
Rough-In Dimensions



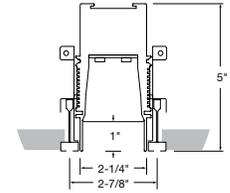
15/16" T-Bar (C1)



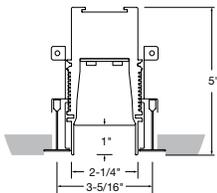
9/16" T-Bar (C2)



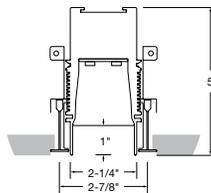
Standard Screw Slot (C3)



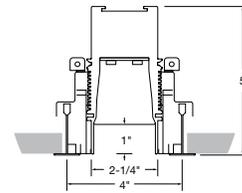
Flush Screw Slot (C3F)



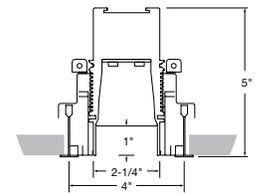
15/16" Tegular (C1T)



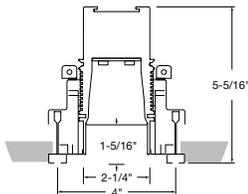
9/16" Tegular (C2T)



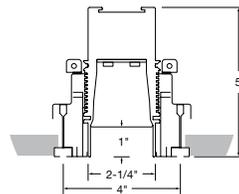
Tech Zone 4" (TZ4)
15/16" T-Bar (C1)



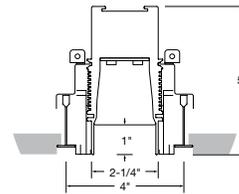
Tech Zone 4" (TZ4)
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)
Standard Screw Slot (C3)

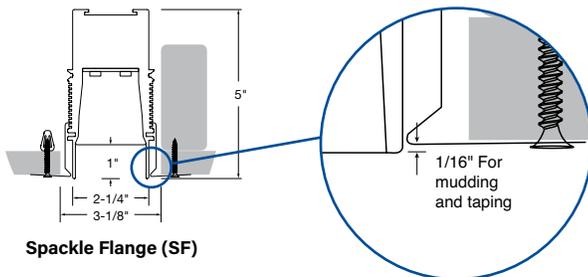


Tech Zone 4" (TZ4)
Flush Screw Slot (C3F)

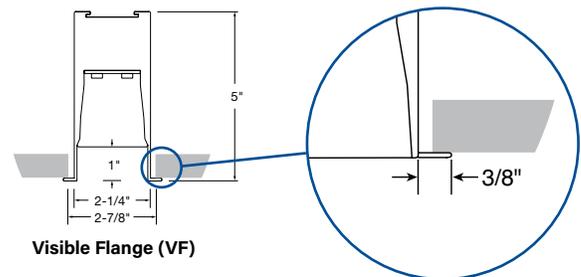


Tech Zone 4" (TZ4)
9/16" Tegular (C2T)

REGRESSED MOUNTING TYPES - CUTOUT DIMENSIONS



Spackle Flange (SF)

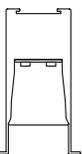


Visible Flange (VF)

Regressed Lens: Regressed lens version is 5" tall with a lens that is regressed 1" from ceiling line.

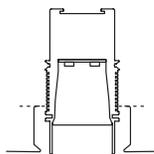
HOUSING

Version 1



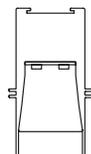
Ceiling Option VF

Version 2



Ceiling Options
C1T, C2T, C3F, SF, TZ4

Version 3



Ceiling Options
C1, C2, C3

Note: +/- 1/16"

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Recessed Photometry - 4' Luminaire 3500K

HP2-R-D-4'-V-835-DAO

Downlight: Downlight Asymmetric Optic - Right

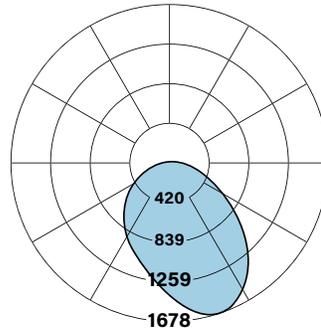
Efficacy: 105 lm/W

Total luminaire output: 3741 lumens (935 lm/ft)
35.5 watts (8.9 W/ft)

Peak Candela Value: 1670 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report REP-051921-01



HP2-R-D-4'-V-835-DSO

Downlight: Downlight Spread Optic

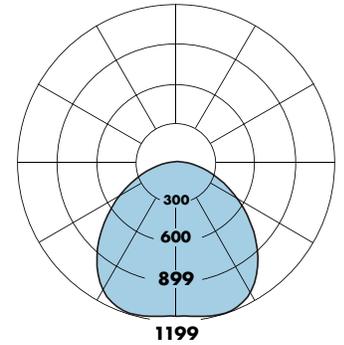
Efficacy: 92 lm/W

Total luminaire output: 3273 lumens (818 lm/ft)
35.7 watts (8.9 W/ft)

Peak Candela Value: 1197 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report 94139



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1531	1925	2910	3741

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
383	481	727	935

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
110	109	107	105

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: REP-051921-01

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1340	1684	2546	3273

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
335	421	636	818

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
96	95	93	92

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 94139

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 2910 lm x 0.789 = 2296 lm
Total Light Output per Foot: 707 lm/ft x 0.789 = 574 lm/ft.
watts/foot: 6.8 W/ft.

$$\text{Efficacy} = \frac{574 \frac{\text{lm}}{\text{ft.}}}{6.8 \frac{\text{W}}{\text{ft.}}} = 84 \text{ lm/W}$$

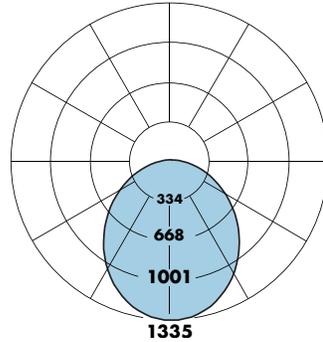
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Recessed Photometry - 4' Luminaire 3500K

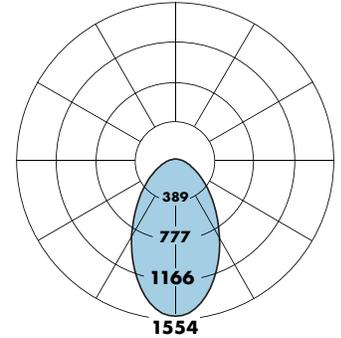
HP2-R-D-4'-V-835
Downlight: Flush Diffuser

Efficacy: 89 lm/W
Total luminaire output: 3287 lumens (822 lm/ft)
36.9 watts (9.2 W/ft)
Peak Candela Value: 1335 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 85135



HP2-R RG-D-4'-V-835
Downlight: Regressed Diffuser

Efficacy: 79 lm/W
Total luminaire output: 2907 lumens (727 lm/ft)
37 watts (9.3 W/ft)
Peak Candela Value: 1554 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 90351



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1346	1692	2557	3287

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
336	423	639	822

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
93	92	90	89

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.
² Based on ITL report: 85135

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1190	1496	2261	2907

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
298	374	565	727

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.1	9.3

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
82	81	80	79

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.
² Based on ITL report: 90351

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 2557 lm x 0.789 = 2017 lm
Total Light Output per Foot: 639 lm/ft x 0.789 = 504 lm/ft.
watts/foot: 71 W/ft.

$$\text{Efficacy} = \frac{504 \frac{\text{lm}}{\text{ft.}}}{7.1 \frac{\text{W}}{\text{ft.}}} = 71 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Wall Wash Recessed - 4' Luminaire 3500K

HP2-R-WW-D-K-4'-V-835

Downlight: With Kicker

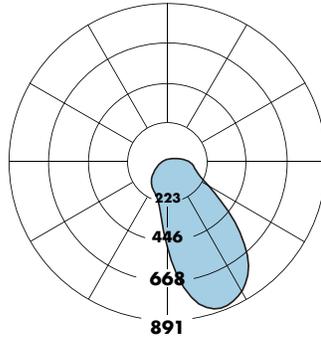
Efficacy: 76 lm/W

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

Peak Candela Value: 882 @ 25°

CRI: 80 / CCT: 3500K

ITL LM79 Report 85137



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
614	772	1167	1500

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
154	193	292	375

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
2.0	2.5	3.8	4.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
76	77	77	77

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 85137

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 1167 lm x 0.789 = 921 lm
Total Light Output per Foot: 292 lm/ft x 0.789 = 230 lm/ft.
watts/foot: 3.8 W/ft.

$$\text{Efficacy} = \frac{292 \frac{\text{lm}}{\text{ft.}}}{3.8 \frac{\text{W}}{\text{ft.}}} = 61 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

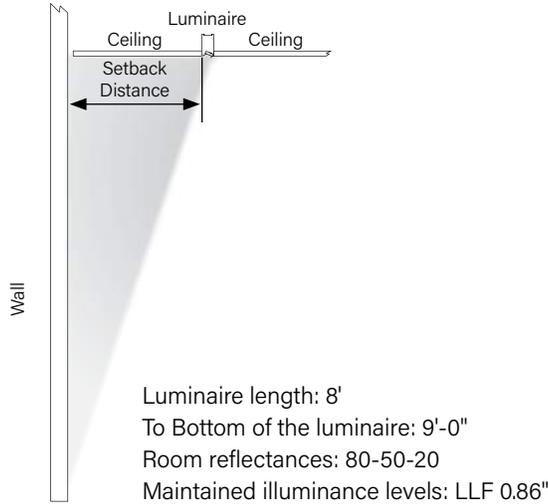
WALL WASH RECESSED - SETBACK INFO AND APPLICATION DATA

HP2-R-WW-D-K-4'-V-835

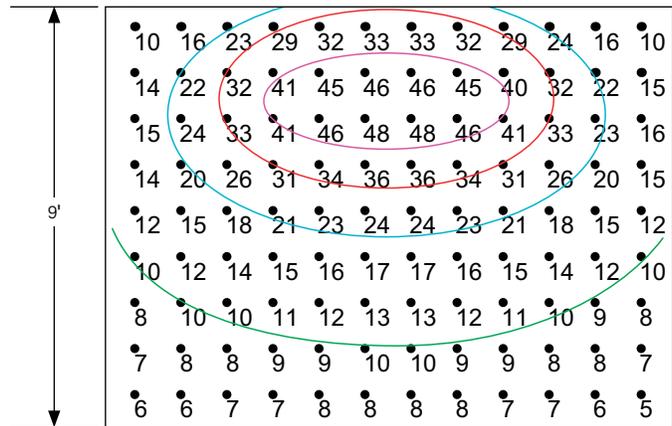
Downlight: With Kicker

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

CRI: 80 / CCT: 3500K



Setback Distance - 2'



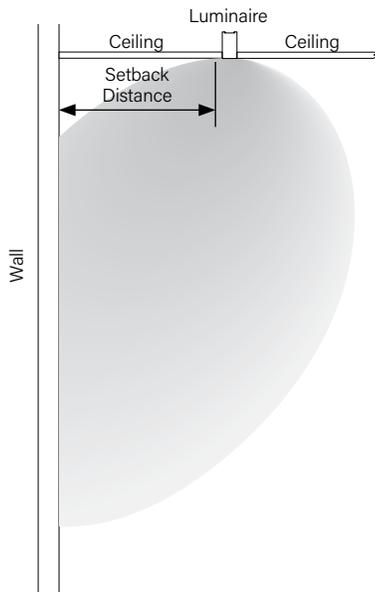
DOWNLIGHT ASYMMETRIC OPTIC - SETBACK INFO AND APPLICATION DATA

HP2-R-D-4ft-V-835-DAO

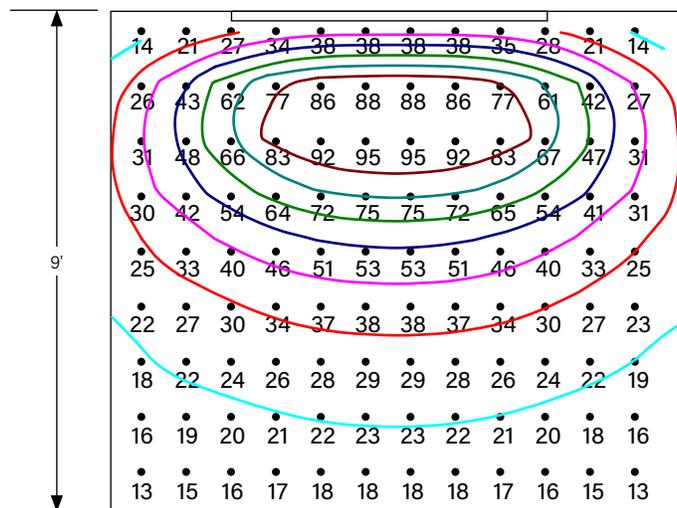
Downlight: DAO

Total luminaire output: 3742 lumens (936 lm/ft)
35.6 watts (8.9 W/ft)

CRI: 80 / CCT: 3500K



Setback Distance - 2'



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

0-10V Tunable White

Finelite's contractor friendly Tunable White luminaires are available at low cost, with powerful and simple 0-10V tuning and intensity controls.

TUNABLE WHITE FEATURES

- CCT range: 2700K - 6500K
- Dimming Range: 100% to 10%
- CRI Options: 80 CRI or 90 CRI

Note:

Dim to Off options available.

LUMINAIRE FAMILY MODIFICATIONS/RESTRICTIONS

Recessed Direct	Section Lengths											
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	
Output S,B,H,V Single Circuit	Rows can be comprised of 2'-12' sections. Tailored lengths available.											
Integral Battery Backup (BSL310LP)							✓		✓		✓	

PHOTOMETRY

Apply a power adjustment factor to calculate wattage usage

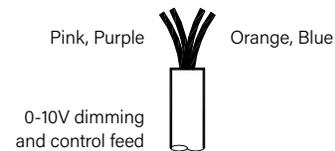
POWER	CONVERSION FACTOR
	1.1X

(Example: a 50 watt luminaire in static white would draw 55 watts using 0-10V Tunable White)

DUAL FEED DETAIL



WIRING LEGEND		
Black	Hot	Line Voltage
White	Neutral	Line Voltage
Green	Ground	



WIRING LEGEND		
Pink	Dimming	0-10V DC
Purple	Dimming	0-10V DC
Orange	TW	0-10V DC
Blue	TW	0-10V DC



ID+ 3.5"

OVERLAP & TRIMLESS LED WALL WASH



clear diffuse



warm diffuse



Optional painted flanges



black painted



white painted



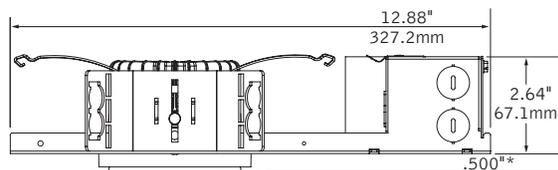
Downlight companion



Adjustable Accent companion

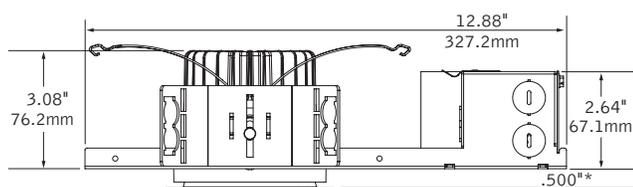
DIMENSIONAL DATA

60° cut-off reflector

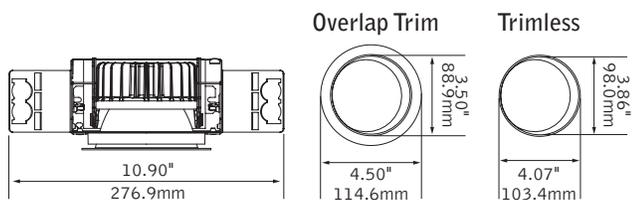


Housing height with DALI, Lutron & LZ1 drivers is 3.0"

50° cut-off reflector



* Field adjustability of ceiling thickness from 0.5" - 1.5".



FEATURES

Less than 2.64" low profile housing available.

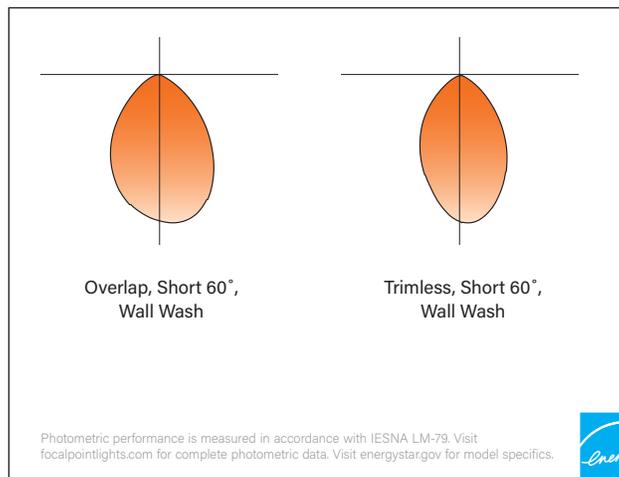
50° cut-off and 60° cut-off reflector options available.

Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

DISTRIBUTIONS



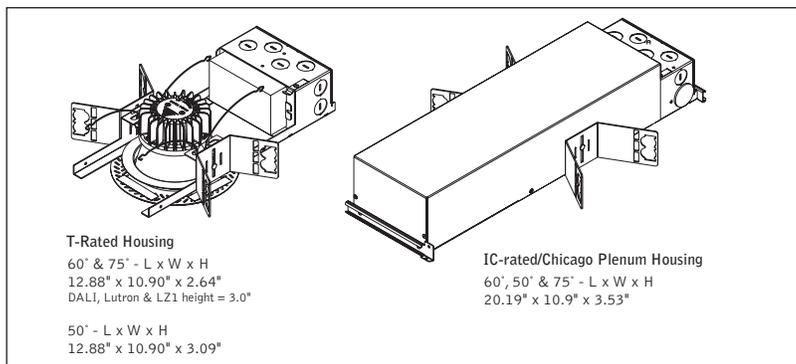
Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data. Visit energystar.gov for model specifics.



fixture:

project:

STANDARD WHITE HOUSING DETAILS



3.5" ROUND WALL WASH PERFORMANCE TABLES

Based on Overlap, Tall Cone, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

STANDARD WHITE				
CCT	Lumen Output	Delivered Lumens	System Watts	LPW
3500K, 80CRI	700L	726	8	87
	900L	907	10	89
	1100L	1102	14	77
	1300L	1311	17	79
	1500L	1516	19	81
	1700L	1712	21	81
	1900L	1903	23	82
	2100L	2130	26	82

STANDARD WHITE HOUSING ORDERING

- Housing Series** ID+ 3.5" Round **FLC3W** FLC3W
- Trim Type** Round Overlap **RO** _____
Round Trimless RT _____
- Color Options** Standard White, 80 & 90 CRI **SW** _____
High 97 CRI HC _____
- Lumen Output** 700 Lumen 700L _____
(Not available with Lutron or LFP)
900 Lumen **900L** _____
(Not available with LFP)
1100 Lumen 1100L _____
1300 Lumen 1300L _____
1500 Lumen 1500L _____
1700 Lumen 1700L _____
1900 Lumen 1900L _____
2100 Lumen 2100L _____
- Voltage** 120/277 Volt **UNV** _____
(IC-rated housing: SW - 1700lm max., HC - 1500lm max.
T-rated & TW housings: SW - 1100lm max., HC - 900lm max.)
120V 120 _____
277V 277 _____
Low Voltage LV _____
(IC-rated housing: SW - 1700lm max., HC - 1500lm max.
T-rated & TW housings: SW - 1100lm max., HC - 900lm max.)
- Control System & Dimming Level** 0-10V <1% Dimming LZ1 _____
0-10V - 1% Dimming L11 _____
0-10V - 10% Dimming **LD1** _____
Low Voltage, PoE Compatible LVN _____
(No driver. LV voltage only.)
Forward Phase (120V only) LFP _____
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming LH1 _____
Lutron Hi-Lume - Forward Phase (120V only) - 1% Dimming LTE _____
DALI <1% Dimming DZ1 _____
DALI - 1% Dimming D11 _____
- Housing Type** IC-Rated / Airtight **IC** _____
(SW - 1700lm max., HC - 1500lm max. Not available with LTE.)
Thermally Protected, Non-IC T _____
Thermally Protected, Non-IC Wood TW _____
(Trimless only. Wood kit required)
- Factory Options** Bar Hangers BH _____
Chicago Plenum CP _____
Outdoor Rated OD _____
(LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 5.)
- TRIM & LED MODULE**
- Aperture** 3.5" Round Reflector **LC3** _____
3.5" Round Airtight Reflector LC3AT _____
- Trim Type** Round Overlap **RO** _____
Round Trimless RT _____
- Color Options** (Trim & housing must match) Standard White, 80 & 90 CRI **SW** _____
High 97 CRI HC _____
- Lumen Output** (Trim & housing output must match.) 700 Lumen 700L _____
900 Lumen **900L** _____
1100 Lumen 1100L _____
1300 Lumen 1300L _____
1500 Lumen 1500L _____
1700 Lumen 1700L _____
1900 Lumen 1900L _____
2100 Lumen 2100L _____
- Color Temperature** (Add 9 for 90 CRI or H for 97 CRI. Leave blank for 80 CRI. Examples: 2700K, 97 CRI = H27K, 2700K, 80 CRI = 27K.) 2700K, 80/90/97+ CRI _27K _____
3000K, 80/90/97+ CRI _30K _____
3500K, 80/90/97+ CRI _35K **935K** _____
4000K, 80/90/97+ CRI _40K _____
- Optic** Tall Cone with 50° cut-off **WWT** _____
Short Cone with 60° cut-off **WWS** _____
- Finish** Clear Diffuse CD _____
Warm Diffuse WD _____
Black BK _____
White **WH** _____
- Optional Flange Finish** (Overlap CD & WD finish only. For matching finishes leave blank.) Black Painted BP _____
White Painted **WP** _____

QS QS Options in red and orange qualify for 2-day and 5-day Quickship respectively, up to 100 pieces. If red and orange options make an ordering string, 5-day Quickship applies. See Quickship Guide for more details.

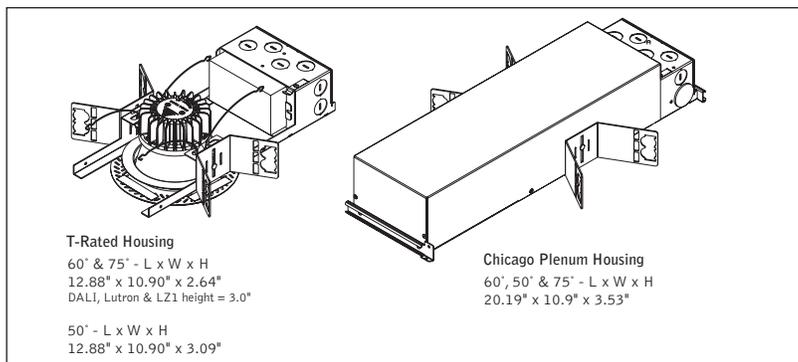
Focal Point LLC reserves the right to change specifications for product improvement without notification.

ACCESSORIES Trimless Wood Ceiling Installation Kit **LC3- WOOD-KIT** _____
(One kit recommended per 10 downlights.)

fixture:

project:

WARM DIM HOUSING DETAILS



WARM DIM

HOUSING ORDERING

Housing Series	ID+ 3.5" Round	FLC3W
Trim Type	Round Overlap	RO
	Round Trimless	RT
Color Options	Warm Dim	WDM
Lumen Output	1500 Lumen	1500L
Voltage	120V	120
	277V	277

Control System & Dimming Level

0-10V <1% Dimming	LZ1
0-10V - 1% Dimming	L11
0-10V - 10% Dimming	LD1
Forward Phase (120V only)	LFP
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1
Lutron Hi-Lume - Forward Phase (120V only) - 1% Dimming	LTE
DALI <1% Dimming	DZ1
DALI - 1% Dimming	D11

Housing Type

IC-Rated / Airtight	IC
Thermally Protected, Non-IC	T
Thermally Protected, Non-IC Wood (Trimless only. Wood kit required)	TW

Factory Options

Bar Hangers	BH
Chicago Plenum	CP
Outdoor Rated (LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 5.)	OD

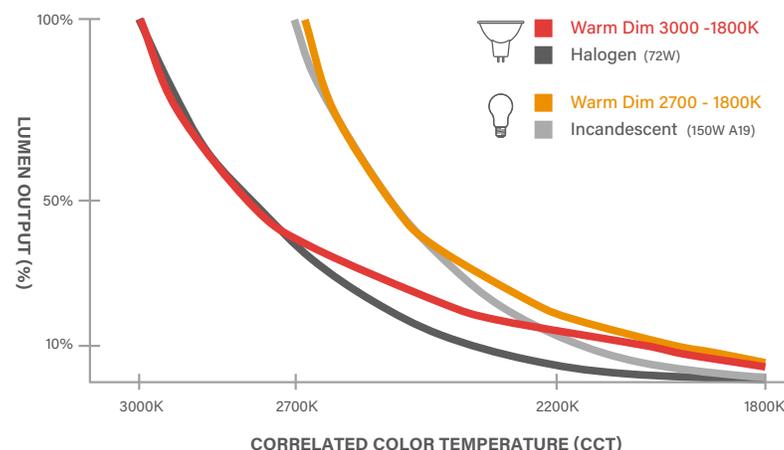
(LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 5.)

3.5" ROUND WALL WASH PERFORMANCE TABLE

Based on Overlap, Tall Cone, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

WD WARM DIM				
CCT Range	Lumen Output	Delivered Lumens	System Watts	LPW
2700 - 1800K	1500L	1367	25	55
3000 - 1800K	1500L	1395	25	56

The 3000K to 1800K and 2700K to 1800K ranges mimic the black body curves of halogen and incandescent light sources, respectively.



TRIM & LED MODULE

Aperture

3.5" Round Reflector	LC3
3.5" Round Airtight Reflector	LC3AT

Trim Type

Round Overlap	RO
Round Trimless	RT

Color Options

Warm Dim	WDM
----------	-----

Lumen Output

1500 Lumen	1500L
------------	-------

Color Temperature

Warm Dim: 2700-1800K, 90+ CRI	92718W
Warm Dim: 3000-1800K, 90+ CRI	93018W

Optic

Tall Cone with 50° cut-off	WWT
Short Cone with 60° cut-off	WWS

Finish

Clear Diffuse	CD
Warm Diffuse	WD
Black	BK
White	WH

Optional Flange Finish

(Overlap CD & WD finish only) (For matching finishes leave blank)

Black Painted	BP
White Painted	WP

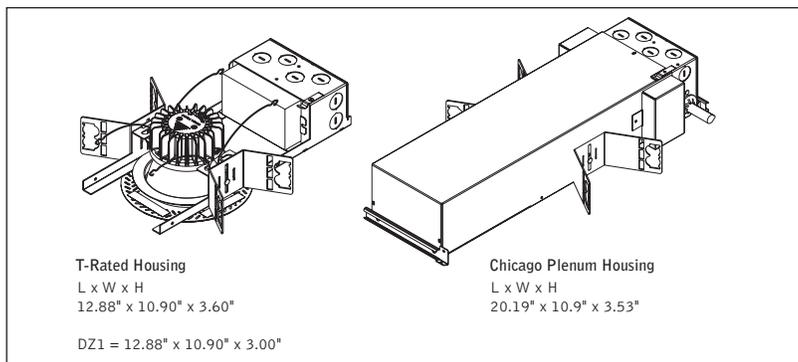
ACCESSORIES

Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights)	LC3- WOOD-KIT
--	---------------

fixture:

project:

TUNABLE WHITE HOUSING DETAILS



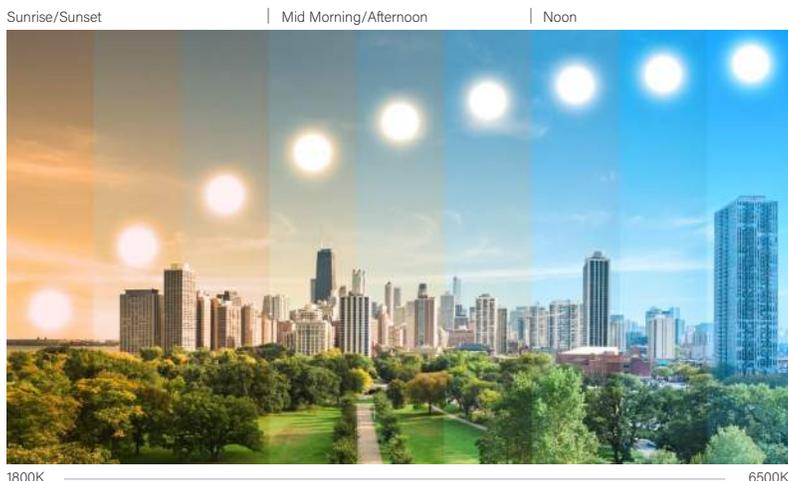
3.5" ROUND WALL WASH PERFORMANCE TABLES

Based on Overlap, Tall Cone, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

TUNABLE WHITE				
CCT	Lumen Output	Delivered Lumens	System Watts	LPW
2700K (2700-5000K & 2700-6500K)	700L	710	15	47
	900L	899	19	47
	1100L	1116	24	46
1800K (1800-4000K)	700L	711	22	32

The Comfort (1800K-4000K), Preference (2700K-5000K), and Activity (2700K-6500K) ranges give specifiers the tools to enhance spaces, mood, and alertness.

DAYLIGHT RANGE



1800K

6500K



TUNABLE WHITE

HOUSING ORDERING

Housing Series	FLC3W
ID+ 3.5" Round	FLC3W
Trim Type	
Round Overlap	RO
Round Trimless	RT
Color Options	
Tunable White: 1800-4000K <small>(700L only)</small>	1840T
Tunable White: 2700-5000K	2750T
Tunable White: 2700-6500K	2765T
Lumen Output	
700 Lumen	700L
900 Lumen	900L
1100 Lumen	1100L
Voltage	
120V	120
277V	277

Control System & Dimming Level	
0-10V <1% Dimming	LZ1
Lutron T-Series <1% Dimming	LTZ
DALI <1% Dimming	DZ1

(Requires 2 addresses, one for light intensity & one for color tuning)

Housing Type	
Thermally Protected, Non-IC	T
Thermally Protected, Non-IC Wood	TW

(Trimless only. Wood kit required)

Factory Options	
Bar Hangers	BH
Chicago Plenum	CP

(900L max. 2750T & 2765T only.)

TRIM & LED MODULE

Aperture	
3.5" Round Reflector	LC3
3.5" Round Airtight Reflector	LC3AT

Trim Type	
Round Overlap	RO
Round Trimless	RT

Color Options	
<small>(Trim & housing must match)</small>	
Tunable White: 1800-4000K	1840T
Tunable White: 2700-5000K	2750T
Tunable White: 2700-6500K	2765T

Lumen Output	
<small>(Trim & housing must match)</small>	
700 Lumen	700L
900 Lumen	900L
1100 Lumen	1100L

Color Temperature	
Tunable White: 1800-4000K, 90+ CRI	91840T
Tunable White: 2700-5000K, 90+ CRI	92750T
Tunable White: 2700-6500K, 90+ CRI	92765T

Optic	
Tall Cone with 50° cut-off	WWT
Short Cone with 60° cut-off	WWS

Finish	
Clear Diffuse	CD
Warm Diffuse	WD
Black	BK
White	WH

Optional Flange Finish	
<small>(Overlap CD & WD finish only) (For matching finishes leave blank)</small>	
Black Painted	BP
White Painted	WP

ACCESSORIES	
Trimless Wood Ceiling Installation Kit <small>(One kit recommended per 10 downlights)</small>	LC3- WOOD-KIT

HOUSING SPECIFICATIONS

Construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Type IC inherently protected, suitable for direct contact with insulation. Restrictive airflow per ASTM-E283. Butterfly brackets allow mounting to 1/2" emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry outs. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 1.5" thickness. For thicker ceiling consult factory. Fixture will not exceed 5 lb. Trim is inherently airtight and may be used to obtain airtight rating when used with IC-rated or thermally protected, non-IC (T) housings.

Electrical

Choice of constant current dimming drivers. Power factor > .9 typical. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Emergency

Above ceiling access required. Overlap trim only. Emergency output - 7W for 90 minutes. Maximum mounting height — Clear Diffuse & White: 22.5ft. Black & Warm Diffuse: 15.3ft.

Labels

UL and cUL Listed. Suitable for Dry, Damp or Wet Locations, indoor use only. Specify Outdoor rated (OD) for outdoor recessed ceiling applications.

Outdoor Rated (OD) Driver Dimming Performance table

Lumen Output	Minimum Dimming Level
700L	20%
900L	16%
1100L	13%
1300L	10%
1500L	10%
1700L	10%
1900L	10%
2100L	10%

Lumen Maintenance

Reported: L70 at >55,000 hours Calculated: L70 at 204,000 hours
 L90 at >55,000 hours L90 at 59,000 hours

Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.

Reliability

At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

Warranty

LED System rated for operation in ambient environments up to 25°C. 5-year limited warranty. Fixture with Outdoor rated option must be installed in a covered ceiling and is warranted for operation in ambient environments between -20°C to +40°C.

TRIM & LED SPECIFICATIONS

LED System

Proprietary array incorporates premium LEDs on a robust platform. May be specified in 2700K, 3000K, 3500K or 4000K, Warm Dimming (2700K-1800K and 3000K-1800K), or Tunable White (1800K-4000K, 2700K-5000K and 2700K-6500K), CRI>80, >90 or 97. Color accuracy within 2 SDCM (Warm Dimming from 3-5 SDCM). 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Aluminum heat sink provides appropriate thermal management.

Aesthetics

Parabolic reflector cone ensures glare free optics. DNT & DNS reflector is .050 spun aluminum. DSS reflector is die-cast aluminum. Trims are self-flanged. Non-painted trim matches reflector finish. Painted flange may also be specified.

Optics

50-degree or 60-degree cut-off to light source and its image. Wall wash features acrylic diffuser to provide smooth illumination down the wall.

Color Lumen Multipliers

CRI	STANDARD WHITE CCT				WARM DIM CCT RANGES		TUNABLE WHITE CCT RANGES		
	2700	3000	3500	4000	2700-1800K	3000-1800K	1800-4000K	2700-5000K	2700-6500K
80+	0.92	0.98	1.00	1.01	-	-	-	-	-
90+	0.79	0.83	0.82	0.84	0.91	0.93	1.00	1.00	1.00
97	0.67	0.72	0.73	0.76	-	-	-	-	-

Distribution Lumen Multipliers

Trim Type	Optic	Distribution	Multiplier
Round Trimless [RT]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.03
	Short Cone with 60° cut-off [WWS]	Wall Wash	1.10
Round Overlap [RO]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.01
	Short Cone with 60° cut-off [WWS]	Wall Wash	1.10

Color Lumen Multipliers

Trim Type	Optic	Color	Multiplier
ALL	Tall Cone with 50° cut-off [WWT]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.91
		White [WH]	1.08
		Black [BK]	0.46
	Short Cone with 60° cut-off [WWS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.93
		White [WH]	1.11
		Black [BK]	0.56

How To Use Lumen Multipliers

Formula:

(Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Color)

Example:

LC3-RO-SW-1100L-935K-WWS-WH
 (1100) x (0.81) x (1.10) x (1.11) ≈ 1088lm (estimated delivered lumens)

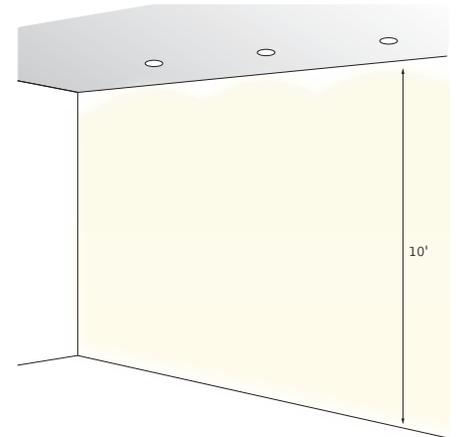
Multiplier charts are provided to aid with estimation of lumen levels across options. Apply multipliers against ordered Lumen Output to estimate Delivered Lumens. An estimation should make use of all tables through consecutive application of three multipliers. Refer to IES files for most accurate photometric information.

ID+ 3.5"

LED WALL WASH

WALL WASH DESIGN GUIDE - 1500 LUMEN, SHORT CONE (WWS) EXAMPLE

Calculation Point Distance from Ceiling	Footcandles									
	Fixtures 3' from Wall			Fixtures 3.5' from Wall			Fixtures 4' from Wall			
	3' OC	3.5' OC	4' OC	3' OC	3.5' OC	4' OC	3' OC	3.5' OC	4' OC	
1'-0"	3"	5 4 4	5 5 5	5 5 5	4 4 4	4 4 4	4 4 4	3 3 3	3 3 3	3 4 4
	6"	7 7 7	8 7 7	8 7 8	5 6 5	6 6 6	6 6 6	4 5 4	5 5 5	5 5 5
	9"	11 11 11	11 11 11	11 11 11	8 9 8	8 8 8	8 8 8	6 7 6	7 7 6	7 7 7
	12"	13 14 13	13 14 13	13 13 13	10 11 10	10 11 10	10 10 10	8 9 8	8 9 8	8 9 8
2'	15 16 15	15 15 15	15 15 15	12 13 12	11 12 11	11 12 11	9 10 9	9 10 9	9 10 9	
3'	17 19 18	17 18 17	17 17 17	14 15 14	14 14 14	13 14 13	11 13 11	11 12 11	11 12 11	
4'	19 22 19	19 20 19	18 19 18	16 17 16	15 16 15	14 15 14	13 14 13	12 13 12	11 13 11	
5'	18 21 18	17 20 17	16 18 16	16 19 16	15 17 15	14 16 14	14 16 14	13 15 13	12 14 12	
6'	16 19 16	15 17 15	14 16 14	15 17 15	14 16 14	13 15 13	14 16 14	13 15 13	12 14 12	
7'	14 16 14	13 15 13	12 14 12	14 15 14	13 15 13	12 14 12	13 15 13	12 14 12	11 13 11	
8'	12 13 12	11 13 11	11 12 11	12 13 12	11 13 11	11 12 11	12 13 12	11 12 11	10 12 10	
9'	10 11 10	10 11 10	9 10 9	11 12 11	10 11 10	9 11 9	10 11 10	10 11 10	9 11 9	
10'	7 7 7	6 7 6	6 7 6	7 8 7	7 7 7	6 7 6	7 8 7	7 8 7	6 7 6	



IES File: FLC3W-RO-SW-1500L-RO-SW-1500L-35K-WWS-CD. Parameters: 80/50/20 reflectances, LLF=.09

WALL WASH DESIGN GUIDE - 1500 LUMEN, TALL CONE (WWT) EXAMPLE

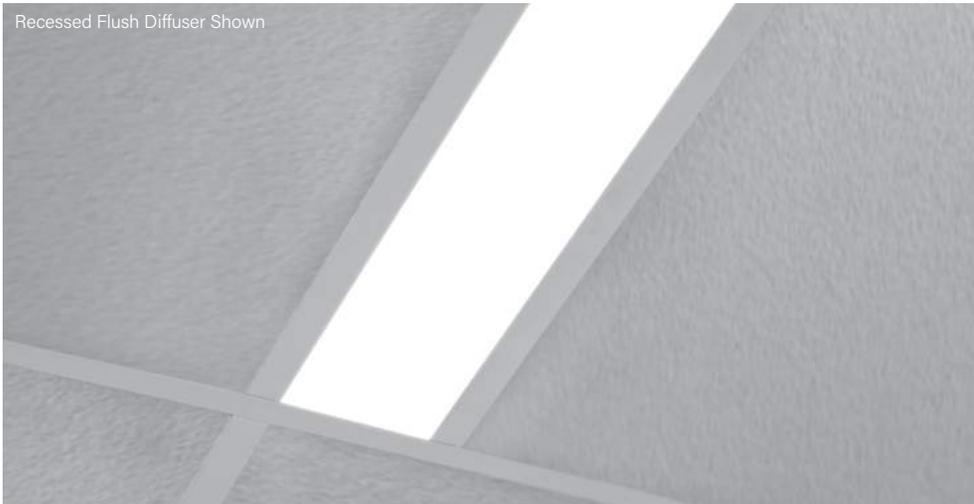
Calculation Point Distance from Ceiling	Footcandles									
	Fixtures 3' from Wall			Fixtures 3.5' from Wall			Fixtures 4' from Wall			
	3' OC	3.5' OC	4' OC	3' OC	3.5' OC	4' OC	3' OC	3.5' OC	4' OC	
1'-0"	3"	6 6 6	7 6 7	7 6 7	5 5 5	5 5 5	5 5 6	4 4 4	4 4 4	5 5 5
	6"	9 9 9	9 9 9	10 9 10	7 7 7	7 7 7	8 7 7	6 6 6	6 6 6	6 7 6
	9"	13 14 13	13 13 13	13 13 13	10 11 10	10 10 10	10 10 10	8 9 8	8 9 8	8 9 8
	12"	16 17 16	16 16 16	16 16 16	12 13 12	12 13 12	12 13 12	10 11 10	10 10 10	10 11 10
2'	17 19 17	18 18 18	18 17 18	14 15 14	14 14 14	13 14 13	11 12 11	11 12 11	11 12 11	
3'	21 23 21	20 21 20	20 20 20	17 18 17	16 17 16	16 17 16	13 15 14	13 14 13	13 14 13	
4'	22 24 22	21 23 21	20 21 20	18 20 18	17 19 17	16 18 16	15 17 15	14 16 14	14 15 14	
5'	22 25 22	20 23 21	19 21 19	18 21 18	17 19 17	16 18 16	16 17 16	15 16 15	14 16 14	
6'	20 23 20	19 21 19	18 20 18	18 20 18	17 19 17	16 18 16	16 18 16	15 17 15	14 16 14	
7'	18 20 18	16 19 16	15 17 15	17 19 17	16 18 16	15 17 15	15 17 15	14 16 14	14 15 14	
8'	15 17 15	14 16 14	13 15 13	15 17 15	14 16 14	13 15 13	14 16 14	14 15 14	13 15 13	
9'	13 15 13	13 14 13	12 13 12	13 15 13	13 14 13	12 14 12	13 14 13	12 14 12	12 13 12	
10'	9 9 9	8 9 8	8 9 8	9 10 9	9 10 9	8 9 8	9 10 9	9 10 9	8 9 8	

IES File: FLC3W-RO-SW-1500L-RO-SW-1500L-35K-WWT-CD. Parameters: 80/50/20 reflectances, LLF=.09

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

TYPE R4



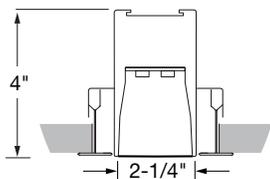
High Performance 2" Aperture is a patented, linear LED luminaire family. HP-2 delivers excellent performance using an advanced optical design and mid-power LEDs. Achieving 90% of initial light output at 100,000+ hours and backed by a 10-year performance-based warranty on all standard components.

This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

Note: see page 6 for all aesthetic options

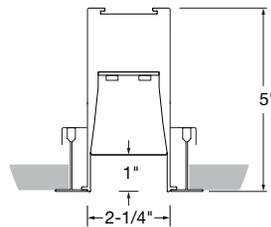
CROSS SECTIONS

Recessed



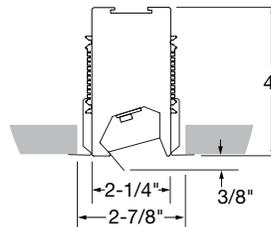
Flush Downlight Diffuser (standard)

Regressed



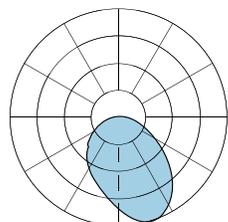
Flat Diffuser with 1" Regressed

Wall Wash Recessed

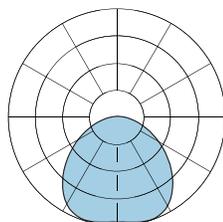


Kicker (standard)

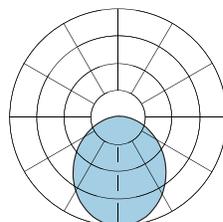
OPTIC OPTIONS



Downlight Asymmetric Optic (DAO)



Downlight Spread Optic (DSO)



Standard Downlight Flush Optic (F)

ALSO AVAILABLE IN



Pendant (D, ID, I)



Wall Mount (WM)



Surface Mount (SM)



Declare.



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Ordering Guide Example: HP - 2 - R - D - 36' - S - 835 - F - 96LG - 120 - SC - FC-10% - FA50 - C1 - FE - SW - LGD18W - OBO - CP

BODY TYPE

OUTPUT AND LED TYPE

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Run	Downlight Output (Flush)	LED CRI/CCT
HP - High Performance	2	R - Recessed R RG - Recessed Regressed (Wall Wash not available)	D - Direct WW-D - Wall Wash Direct	Minimum 2' section length. Increments accurate to 1/16" (±1/32"), standard. 12' maximum section length.	S - Standard (336 lm/ft) B - Boosted (423 lm/ft) H - High (639 lm/ft) V - Very High (822 lm/ft) TL - Tailored: _____lm/ft* Lumen provided above are for Flush lens only, see pg. 12 for WW lumens * Specify Tailored lm/ft of outputs between Standard (S) and Very High (V). Consult factory for tailored lumen output outside of this range.	830 - 80 CRI, 3000K 835 - 80 CRI, 3500K 840 - 80 CRI, 4000K 930 - 90 CRI, 3000K 935 - 90 CRI, 3500K 940 - 90 CRI, 4000K 8TW - 80 CRI, Tunable White 9TW - 90 CRI, Tunable White

MECHANICAL/OPTICAL OPTIONS

ELECTRICAL OPTIONS

Downlight	Reflector System	Voltage	Circuiting ²
F - Flush (standard) ^{8,9} DL - 1" Drop Down Lens ⁸ RG-D - Flat Diffuser with 1" Regress ^{1,8} RG-WCB - White Cross Blade Baffle ^{1,8} RG-LHE - Hollowed Ellipse Louver ^{1,8} RG-LHC - Hex Louver ^{1,8}	DAO-L - Downlight Asymmetric Left ^{4,8} DAO-R - Downlight Asymmetric Right ^{4,8} DSO - Downlight Spread Optic ^{4,8} K - Kicker for Wall Wash only (standard) ⁵ FO - Fully Open for Wall Wash only	96LG - 96 Low Gloss White SW - Signal White for Wall Wash only	SC - Single Circuit* One single circuit in a run MC - Multi-Circuit* More than one switch leg or zone. Factory shop drawings required * Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)

ELECTRICAL OPTIONS

Driver Selection

0-10V Driver Options

FC-10% - 0-10V 10% (standard)
FC-1% - 0-10V 1%
OTi-10% - EldoLED OTi, 0-10V 10%³
OTi-1% - EldoLED OTi, 0-10V 1%³
ELD-10V-0% - EldoLED SOLOdrive, 0-10V 0.1%
10V-TW-10% - EldoLED OTi, 0-10V 10% (Tunable White)³

DALI Driver Options

FC-DALI-1% - DALI 1%
DXL-DALI-1% - EldoLED Dexal, 1%
ELD-DALI-0% - EldoLED SOLOdrive, 0.1%
ELD-DALI-TW - EldoLED DUALdrive LightShape, 0.1% (Tunable White)

DMX Driver Options

ELD-DMX - EldoLED POWERdrive, 0.1%
ELD-DMX-TW - EldoLED POWERdrive, 0.1% (Tunable White)

Lutron Driver Options

LUT-ES1 - Lutron, Ecosystem 1%
LUT-TW - Lutron LD2 Dalı-2 1% (Tunable White)

See Page 3 for additional driver options and details

MOUNTING OPTIONS

OTHER OPTIONS

Ceiling Hardware Type	Endcap Style	Finish
C1 - 15/16" T-Bar C1T - 15/16" Tegular C2 - 9/16" T-Bar C2T - 9/16" Tegular C3 - Screw Slot	C3F - Flush Screw Slot SF - Spackle Flange VF - Visible Flange TZ4 - Tech Zone 4" _____ (C1, C2, C2T, C3, C3F)	FE - Flat Endcap (standard) SW - Signal White (standard) FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code ⁷ _____

OTHER OPTIONS

Emergency Style (Optional) <small>See page 5 Backup Battery table</small>	Integrated Sensor (Optional) ⁸	Special Options (Optional)
LGD18W - Legrand 18W Brand Battery Back-up LGD10W - Legrand 10W Brand Battery Back-up EM/GEN - Emergency to Generator NL - Night Light BSL310LP - Bodine Battery Back up Low Profile GTD - Generator Transfer Device ALCR - Automatic Load Control Relay	OBO - Occupancy ⁹ OBD - Daylight ⁹ W601 - Wattstopper Wireless Sensor ¹⁰ OBE - Enlighted ¹¹ REE - Remote Enlighted ¹² CLM - Encelium RF SLM - Encelium Sensor	AOCC-W - Lutron Athena Sensor (Device Color White) ¹³ AOCC-B - Lutron Athena Sensor (Device Color Black) ¹³ ARF-W - Lutron Athena RF (Device Color White) ¹³ ARF-B - Lutron Athena RF (Device Color Black) ¹³ VOCC - Lutron Vive Wireless Sensor (VDO) ¹⁴ VRF - Lutron Vive Radio Only ¹⁴

¹ Recessed Regressed straight run only

² Contact factory for switching options

³ Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO)

⁴ Not available with Regressed or Curves

⁵ Kicker standard in Signal White. Customer Custom color kickers have a surcharge

⁶ B & V outputs only

⁷ 20 business days lead time for color

⁸ Minimum fixture length with a sensor is 3ft.

⁹ Not available with Wall Wash

¹⁰ LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected.

¹¹ LMFS-601 w/ Dalı driver, only 1 driver can be connected.

¹² Enlighted components installed by Finelite, provided by others

¹³ Enlighted for Wall Wash fixtures. Enlighted Control Unit & Sensor Cable installed for Remote mounting sensor.

¹⁴ 0-10V Drivers - AOCC up to 10 drivers may be connected; ARF up to 40 drivers may be connected DALı Drivers - AOCC & ARF up to 4 drivers can be connected.

¹⁵ Lutron Vive Integrated Sensors require a DALı driver

¹⁶ Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SUPPLEMENTARY DRIVER PAGE

0-10V Driver Options

FC-10%	Factory Choice, 0-10V 10% Dimming (Linear)
FC-10%-DTO	Factory Choice, 0-10V 10% Dimming, Dim-to-Off (Linear)
FC-1%	Factory Choice, 0-10V 1% Dimming (Linear)
FC-1%-DTO	Factory Choice, 0-10V 1% Dimming, Dim-to-Off (Linear)
ELD-10V-0%	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
ELD-10V-1%	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
10V-TW-10%	EldoLED OTi, 0-10V 10% Dimming, Tunable White (Linear)
10V-TW-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, Tunable White (Linear)
OTi-10%	EldoLED OTi, 0-10V 10% Dimming (Linear)
OTi-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
OTi-1%	EldoLED OTi, 0-10V 1% Dimming (Linear)
OTi-1%-DTO	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

DALI Driver Options

FC-DALI-1%	Factory Choice, DALI 1% Dimming (Logarithmic)
DXL-DALI-1%	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
ELD-DALI-0%	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
ELD-DALI-1%	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)
ELD-DALI-TW	EldoLED DUALdrive Light Shape, DALI 0.1% Dimming, Tunable White (Logarithmic Dimming, Linear CCT Control)

DMX Driver Options

ELD-DMX	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
ELD-DMX-16	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)
ELD-DMX-TW	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (8 Bit, 2CH - CH1 Warm / CH2 Cool) (Linear)
ELD-DMX-TW16	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (16 Bit, 4CH - CH1, 2 Warm / CH3, 4 Cool) (Linear)

Lutron Driver Options

LUT-ES1	Lutron, Ecosystem 1% Dimming
LUT-TW	Lutron LD2 Dali-2 1%, Tunable White

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SPECIFICATIONS

BODY TYPE

CONSTRUCTION: Precision-cut 6063-T6 extruded aluminum body. Internal joiner system and plug-together wiring are standard.

LENGTHS: Any length, 2' minimum, in increments down to 1/16th" ($\pm 1/32"$). 12' maximum section length. Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**), and White Cross Blade Baffle (**WCB**) are available in 1' increments.

MITERED CORNERS¹ : Illuminated corners of greater than 60° and less than 180° in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, Regressed Diffuser, or White Cross Blade Baffle². Corners not available with Wall Wash (**WW-D**), Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**) or 1" Drop Down Lens. Contact factory for Double miters using the White Cross Blade Baffle. Consult factory for tailored lighting options.

OUTPUT AND LED TYPE

LIGHT OUTPUT: Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). For lengths 3' and greater, the uplight and downlight can be specified with different lumen packages and dual controls. For Tailored Outputs outside of range from Standard (**S**) to Very High (**V**), consult factory. Light engines are replaceable.

MECHANICAL/OPTICAL OPTIONS

DOWNLIGHT OPTION: 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Available with Flush (**F**), Bottom Glow (**BG**), 1" Drop Down Lens (**DL**), White Cross Blade Baffle (**WCB**)^{3,4}, Ellipse Louver (**LHE**)³, Hex Louver (**LHC**)³, Downlight Asymmetric Optic (**DAO**)⁵, Downlight Spread Optic (**DSO**)⁵, and Regressed downlight diffusers (**RG**)³. 1" Drop Down Lens made of highly efficient acrylic. Available with a solid endcap or an endcap with a diffuse filler to continue the luminous aesthetic. Downlight Spread & Downlight Asymmetric Optics are extruded lenses with a subtle ribbed appearance providing a batwing or asymmetric distribution for improved optical performance. Consult factory for more tailored lumen outputs.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

REFLECTORS: Die-formed 20-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint. The standard Semi-Specular Aluminum (**SSA**) Kicker (**K**) reflector delivers light high on the vertical surface. The Kicker reflector can be easily removed for open distribution (**FO**).

ELECTRICAL OPTIONS

STATIC WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed wire controlling uplight and downlight together (power and dimming). Specify dual feed wires for independent control of uplight and downlight. 14-gauge feed wire used when luminaire current exceeds 5 amps.

TUNABLE WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when luminaire current exceeds 5 amps. DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

0-10V:

- One 18-gauge / 3-conductor power
- One 18-gauge / 4-conductor for dimming and controls

Dali:

- One 18-gauge / 5-conductor power and controls

DMX:

- One 18-gauge / 3-conductor power
- One DMX feed

STATIC WHITE DRIVER: Replaceable 120V, 277V, and 347V constant current reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%- 100% standard. Dimming to 1% available. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

– **Power Factor:** ≥ 0.9

– **Total Harmonic Distortion (THD):** <20%

– **Expected driver lifetime:** 100,000 hours

LUTRON DRIVER OPTIONS:

LUT-ES1 - Hi-lume 1% EcoSystem with Soft-On, Fade-to-Black dimming (LDE1 series).

TUNABLE WHITE DRIVER: Replaceable LED driver. Driver is accessible from below the ceiling. 120V and 277V.

– **Power factor:** ≥ 0.90

– **Total Harmonic Distortion (THD):** <20%

– **Dimming Range:** 100%-10%

– **Expected driver lifetime:** 100,000 hours

LUTRON TUNABLE WHITE DRIVER OPTION:

LUT-TW - Lutron LD2 Dali-2 1%, Tunable White.

¹ Not available with Wall Wash

² White Cross Blade (WCB) baffles not available with custom angles. Available in 90 degrees only

³ Recessed Regressed straight run only

⁴ White Cross Blade Baffle (WCB) currently not advisable for drywall

⁵ Not available with Regressed or Curves

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

SPECIFICATIONS

MOUNTING OPTIONS

HANGING HARDWARE:

- **Recessed T-Bar:** Standard bracket design works with most lay-in ceiling types. Brackets secure luminaire to the ceiling grid from above. Tie-in T-Bar brackets connect the luminaire to the T-Bar for securing to structure. Consult local codes for tie-wire recommendations.
- **Recessed Spackle Flange:** Drywall surfaces (walls or ceilings): 1/4" - 20 stud and nut (provided by others). Mounted with three equidistant suspension points.

TUNABLE WHITE DMX HANGING HARDWARE: For grid ceiling applications the dual GridBox™ mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5' (standard), 12', and 30'.

TUNABLE WHITE DMX INTERCONNECTION CABLES: Luminaires are prewired with plug-and-play interconnected cables to support easy plug-together joining of fixture runs. DMX to RJ45 adapters and an RJ45 terminator for every 32 DMX drivers are included.

OTHER OPTIONS

ENDCAPS: Flat endcaps (**FE**) at each end of run add 1/16" to each end of luminaire. Drop Down Lens Illuminated Endcap (**DE**) includes diffuse element to continue luminance of drop lens.

EMERGENCY STYLE: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery.

Backup Battery		
	Legrand 18W	Legrand 10W / Bodine BSL310LP
HP2-R-D		
Min. Housing Length	8*	4**
EM Lumen Output	1608	956
EM Section Illuminated	2'	2' or 4'
HP2-R-WW-D		
Min. Housing Length	8*	4**
EM Lumen Output	1500	891
EM Section Illuminated	4'	4'

* Minimum fixture housing length for battery pack approved without sensor. ** Exception: 5' not available, 6'+ okay. The lumens are based on 835. For other CCT/CRI, refer to the Lumen Adjustment Factor table on page 11.

Bodine GTD and Legrand ALCR Min. Length	
Configuration	Min Length
Generator	6'
Generator + OCC	8'
Daylight	6'
Generator + Daylight	8'

TUNABLE WHITE ELECTRICAL OPTIONS⁶:

TW Driver Options

- **0-10V:** EM/GEN, GTD or Battery BackUp
- **DMX:** Battery Back Up
- **DALI:** EM/GEN, GTD or Battery Back Up
- **LUTRON:** EM/GEN, GTD or Battery Back Up

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) Occupancy (**OBO**) or Daylight Sensors (**OBD**) available with Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options. Minimum fixture length with a sensor is 3ft. The default location for the Connected Lighting Module (**CLM**) will be on the topside of the fixture for all mounting types except for Surface Mount (**SM**). In SM fixtures the CLM will be located on the direct side of fixture housed in a bracket that is flush with the direct lens.

FINISHES: Finelite Signal White (**SW**) powder coat, Finelite Black (RAL 9005) with semi gloss fine texture (**FB**), and Satin Aluminum (**SA**) are standard. Optional Adder: 179 RAL colors⁷ are available.

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 - PoE options available on request. These fixtures are rated for Damp Location. IC Rated. HP-2 can be used to comply with 2016 Title 24, Part 6 (JA8); high efficacy LED light source requirements. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/863. Consult factory for tailored lighting options. Finelite makes the specification process easy when putting healthier products on your projects. Simply add - **RLA** (Red List Approved) or - **RLD** (Red List Declared) to your part number.

WEIGHT⁸: R - 2.3 lb/ft; WW-R - 2.9 lb/ft

WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

⁶ Consult Finelite for Generator Transfer Device and Battery Backup fit

⁷ 20 business days lead time for color

⁸ Excludes Battery Backup and Generator Transfer Device weight

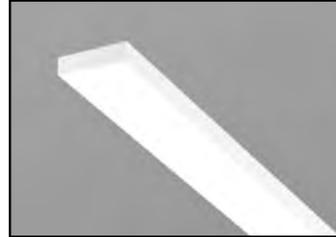
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

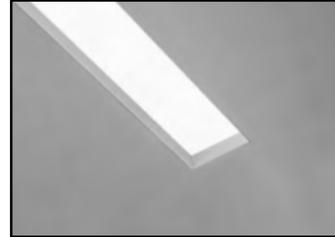
AESTHETIC OPTIONS



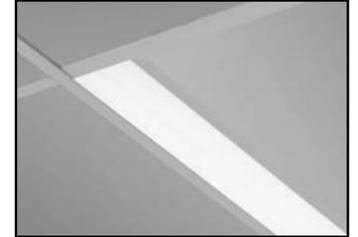
Flush Diffuser (**F**)



1" Drop Down Lens (**DL**)



Flat Diffuser with 1" Regressed (**RG-D**)



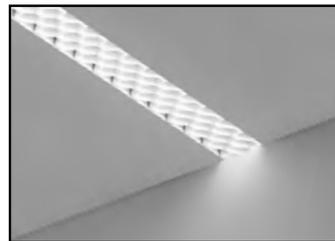
Downlight Asymmetric Optic (**DAO**)¹
Externally flush



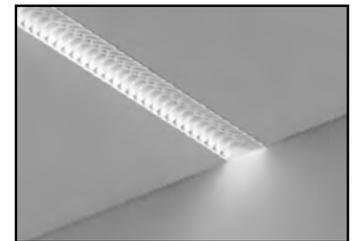
Downlight Spread Optic (**DSO**)¹
Externally flush



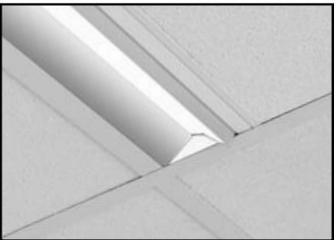
White Cross Blade Baffle² (**RG-WCB**)



Hex Louver² (**RG-LHC**)



Hollowed Ellipse Louver² (**RG-LHE**)



Kicker (**K**) - Wall Wash only

¹ With a subtle ribbed appearance providing specialized distribution

² Regressed only. Not available with Wall Wash

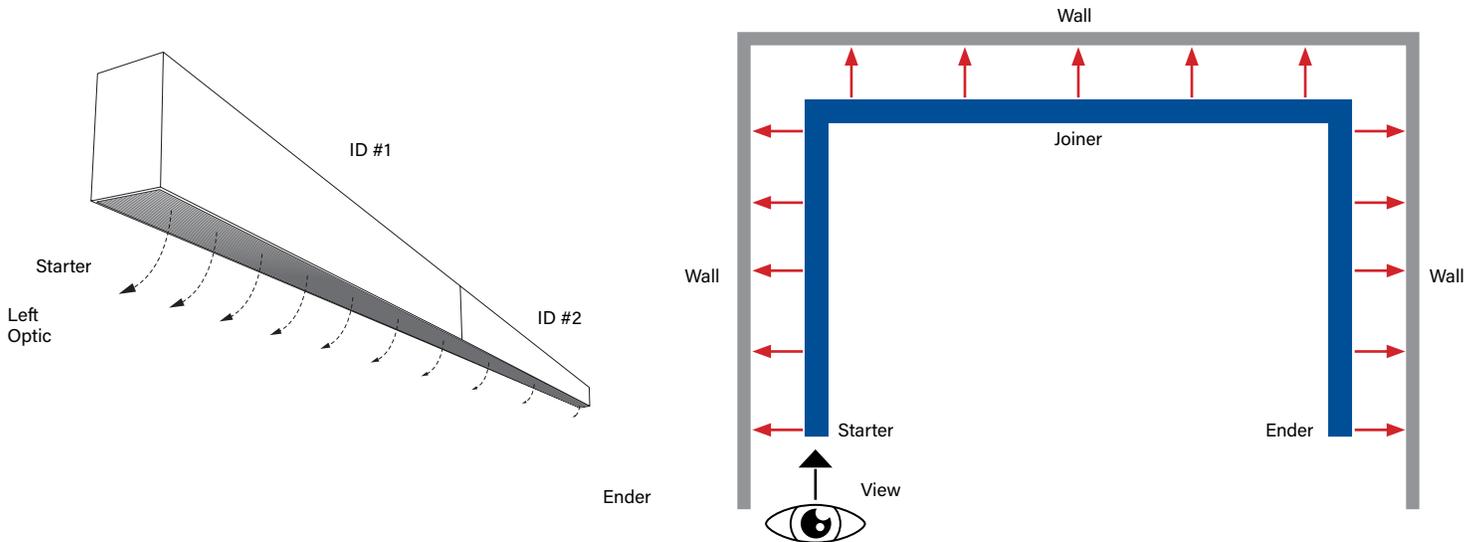
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

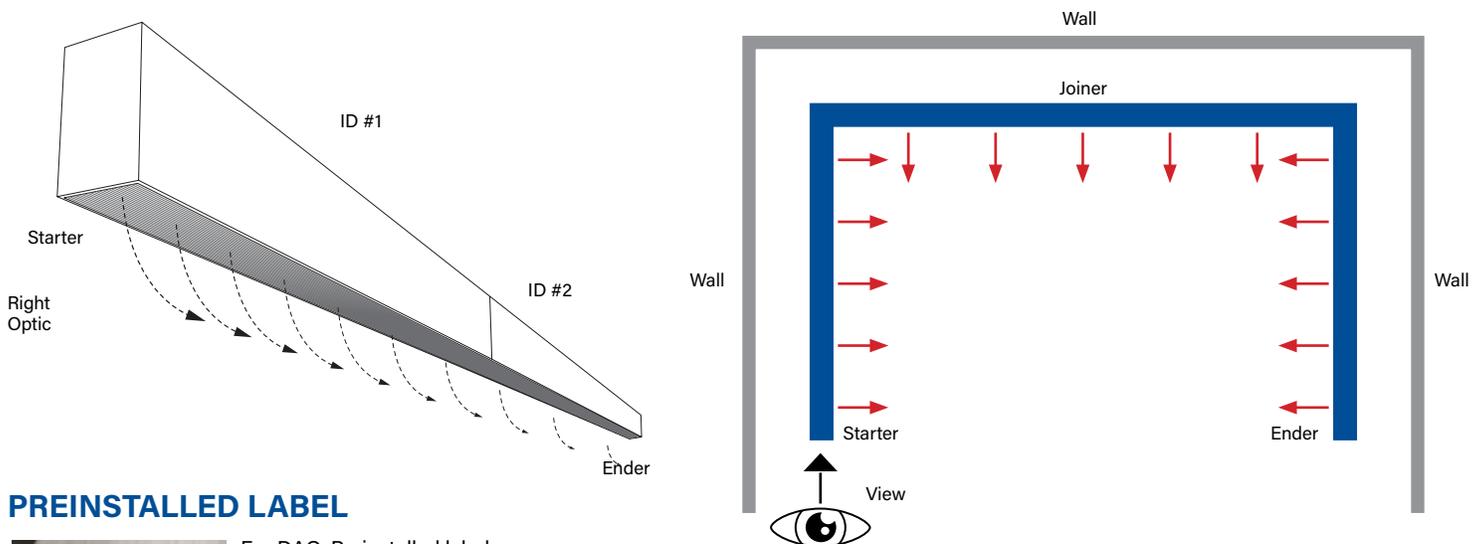
DOWNLIGHT ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying DAO-L distributes light to the left or DAO-R distributes light to the right. For proper orientation: view luminaire from starter end when specifying the direction of the Downlight Asymmetric optic.

Downlight Asymmetric Optic Left (DAO-L)



Downlight Asymmetric Optic Right (DAO-R)



PREINSTALLED LABEL



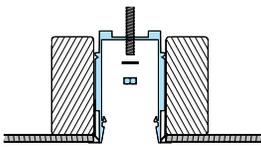
For DAO, Preinstalled label on diffuser shows direction of light. Remove after installation.

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

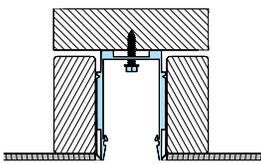
High Performance 2" Aperture (HP-2) Recessed

HARD CEILING MOUNTING OPTIONS

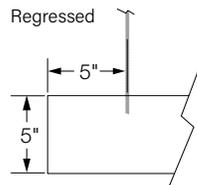
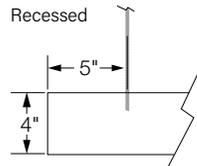
Threaded Rod Option



Screw Mount Option

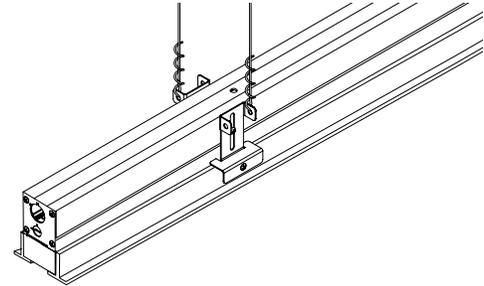


Mounting Location for Securing to Structure



Two mounting options: threaded rod and screw mounting options. Mounting locations are located on each end of the luminaire. Mounting location is 5" away from each end of luminaire.

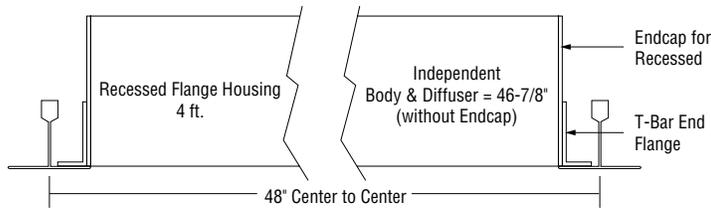
T-BAR INSTALLATION



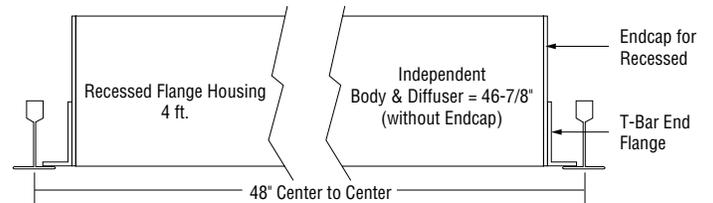
HP-2 R for T-Bar installations comes standard with a splice plate at the end of the luminaire. Mounting brackets (supplied) secure the luminaire to T-Bar and provide support to structure location. All even foot length (2, 4, 6, ...) luminaire runs are reduced in length by an appropriate amount to fit within typical 2x2 and 2x4 T-Bar grid systems. For uncommon T-Bar systems please consult factory.

GRID LENGTH DETAIL - 4' EXAMPLE

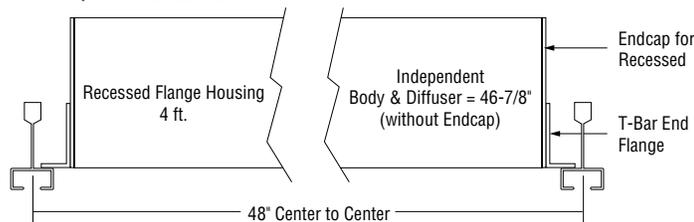
15/16" T-Bar



9/16" T-Bar

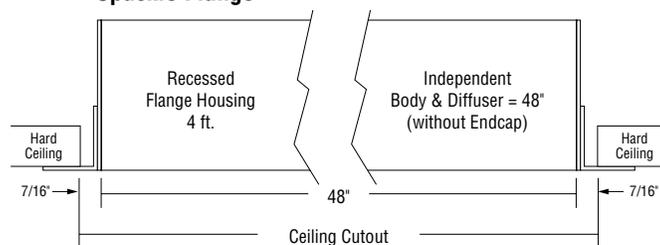


9/16" Screw Slot

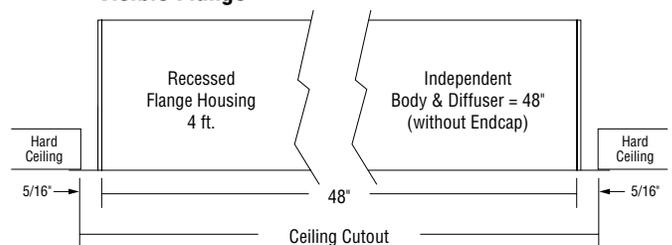


HARD CEILING LENGTH DETAIL - 4' EXAMPLE

Spackle Flange



Visible Flange

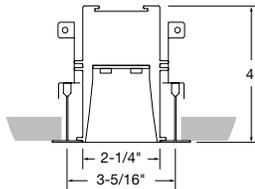


Submitted by:		Date:
Type:	Project:	
Ordering Info:		

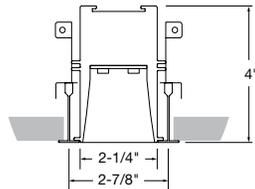
High Performance 2" Aperture (HP-2) Recessed

RECESSED MOUNTING TYPES - T-BAR

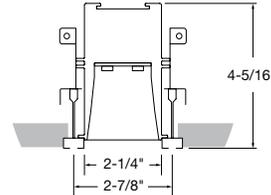
Rough-In Dimensions



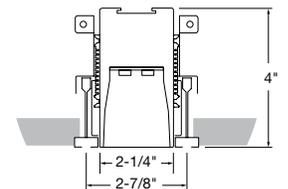
15/16" T-Bar (C1)



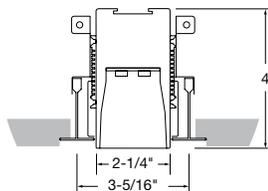
9/16" T-Bar (C2)



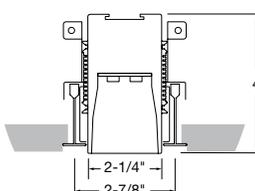
Standard Screw Slot (C3)



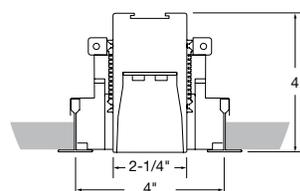
Flush Screw Slot (C3F)



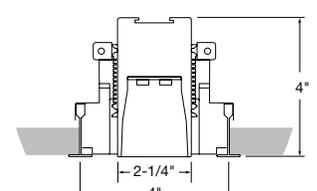
15/16" Tegular (C1T)



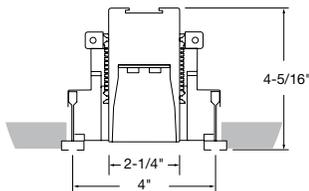
9/16" Tegular (C2T)



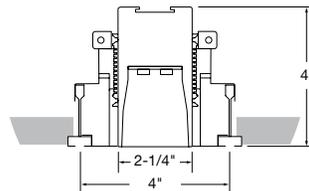
Tech Zone 4" (TZ4)
15/16" T-Bar (C1)



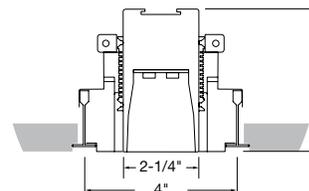
Tech Zone 4" (TZ4)
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)
Standard Screw Slot (C3)

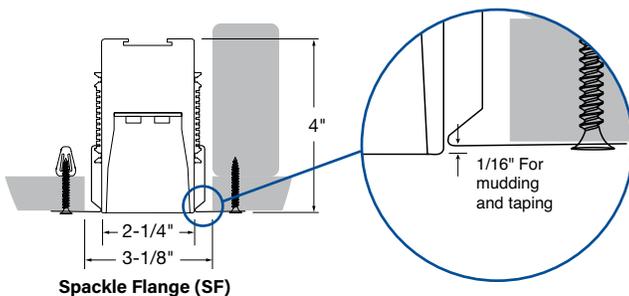


Tech Zone 4" (TZ4)
Flush Screw Slot (C3F)

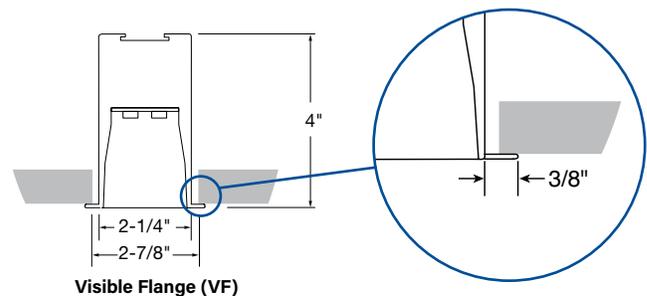


Tech Zone 4" (TZ4)
9/16" Tegular (C2T)

RECESSED MOUNTING TYPES - CUTOUT DIMENSIONS



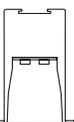
Spackle Flange (SF)



Visible Flange (VF)

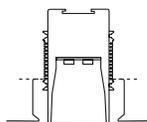
HOUSING

Version 1



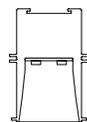
Ceiling Option VF

Version 2



Ceiling Options
C1T, C2T, C3F, SF, TZ4

Version 3



Ceiling Options
C1, C2, C3

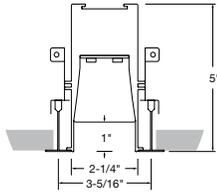
Note: +/- 1/16"

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

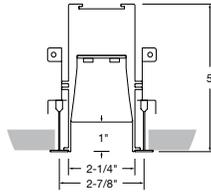
High Performance 2" Aperture (HP-2) Recessed

REGRESSED MOUNTING TYPES - T-BAR

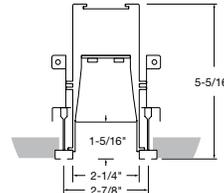
Rough-In Dimensions



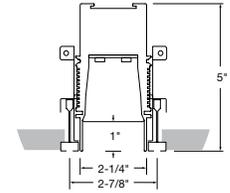
15/16" T-Bar (C1)



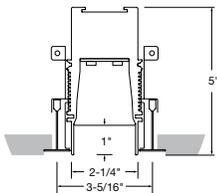
9/16" T-Bar (C2)



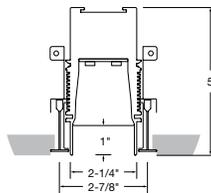
Standard Screw Slot (C3)



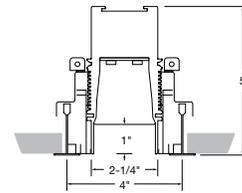
Flush Screw Slot (C3F)



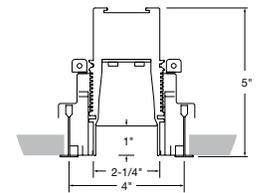
15/16" Tegular (C1T)



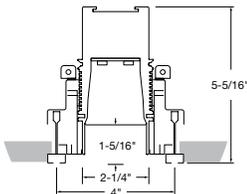
9/16" Tegular (C2T)



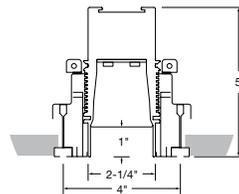
Tech Zone 4" (TZ4)
15/16" T-Bar (C1)



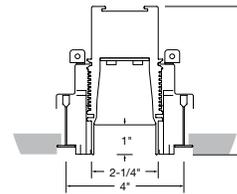
Tech Zone 4" (TZ4)
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)
Standard Screw Slot (C3)

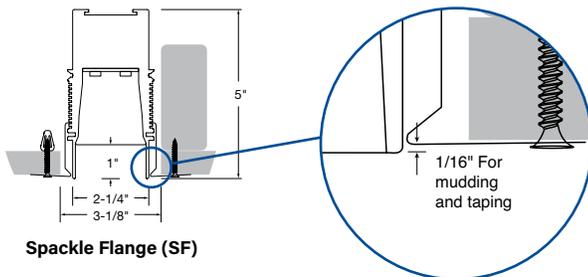


Tech Zone 4" (TZ4)
Flush Screw Slot (C3F)

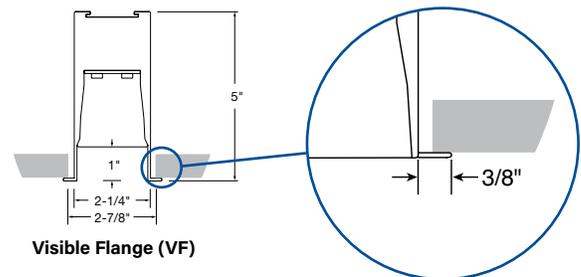


Tech Zone 4" (TZ4)
9/16" Tegular (C2T)

REGRESSED MOUNTING TYPES - CUTOUT DIMENSIONS



Spackle Flange (SF)

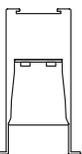


Visible Flange (VF)

Regressed Lens: Regressed lens version is 5" tall with a lens that is regressed 1" from ceiling line.

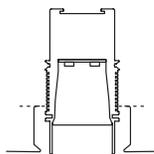
HOUSING

Version 1



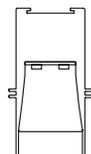
Ceiling Option VF

Version 2



Ceiling Options
C1T, C2T, C3F, SF, TZ4

Version 3



Ceiling Options
C1, C2, C3

Note: +/- 1/16"

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Recessed Photometry - 4' Luminaire 3500K

HP2-R-D-4'-V-835-DAO

Downlight: Downlight Asymmetric Optic - Right

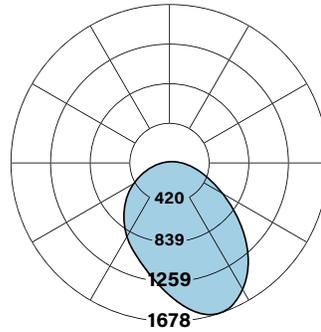
Efficacy: 105 lm/W

Total luminaire output: 3741 lumens (935 lm/ft)
35.5 watts (8.9 W/ft)

Peak Candela Value: 1670 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report REP-051921-01



HP2-R-D-4'-V-835-DSO

Downlight: Downlight Spread Optic

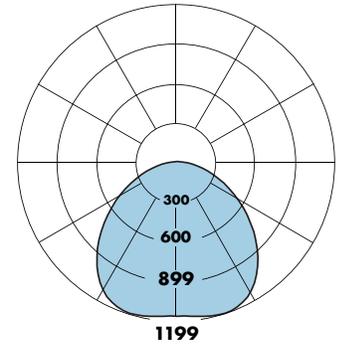
Efficacy: 92 lm/W

Total luminaire output: 3273 lumens (818 lm/ft)
35.7 watts (8.9 W/ft)

Peak Candela Value: 1197 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report 94139



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1531	1925	2910	3741

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
383	481	727	935

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
110	109	107	105

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: REP-051921-01

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1340	1684	2546	3273

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
335	421	636	818

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
96	95	93	92

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 94139

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI

Lumen Adjustment Factor: 0.789

Total Light Output: 2910 lm x 0.789 = 2296 lm

Total Light Output per Foot: 707 lm/ft x 0.789 = 574 lm/ft.

watts/foot: 6.8 W/ft.

$$\text{Efficacy} = \frac{574 \frac{\text{lm}}{\text{ft.}}}{6.8 \frac{\text{W}}{\text{ft.}}} = 84 \text{ lm/W}$$

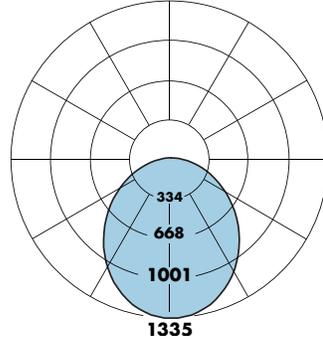
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Recessed Photometry - 4' Luminaire 3500K

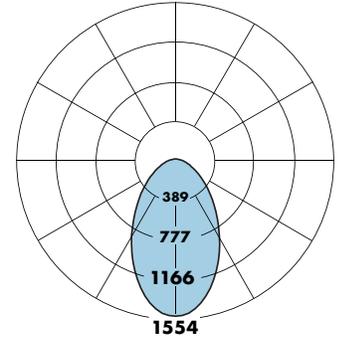
HP2-R-D-4'-V-835
Downlight: Flush Diffuser

Efficacy: 89 lm/W
Total luminaire output: 3287 lumens (822 lm/ft)
36.9 watts (9.2 W/ft)
Peak Candela Value: 1335 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 85135



HP2-R RG-D-4'-V-835
Downlight: Regressed Diffuser

Efficacy: 79 lm/W
Total luminaire output: 2907 lumens (727 lm/ft)
37 watts (9.3 W/ft)
Peak Candela Value: 1554 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 90351



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1346	1692	2557	3287

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
336	423	639	822

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
93	92	90	89

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 85135

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1190	1496	2261	2907

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
298	374	565	727

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.1	9.3

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
82	81	80	79

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 90351

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 2557 lm x 0.789 = 2017 lm
Total Light Output per Foot: 639 lm/ft x 0.789 = 504 lm/ft.
watts/foot: 71 W/ft.

$$\text{Efficacy} = \frac{504 \frac{\text{lm}}{\text{ft.}}}{7.1 \frac{\text{W}}{\text{ft.}}} = 71 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

Wall Wash Recessed - 4' Luminaire 3500K

HP2-R-WW-D-K-4'-V-835

Downlight: With Kicker

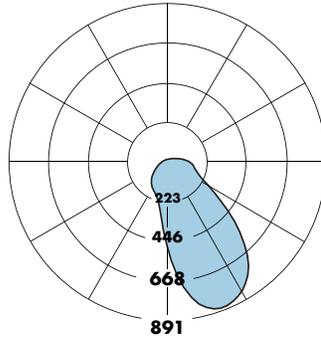
Efficacy: 76 lm/W

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

Peak Candela Value: 882 @ 25°

CRI: 80 / CCT: 3500K

ITL LM79 Report 85137



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
614	772	1167	1500

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
154	193	292	375

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
2.0	2.5	3.8	4.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
76	77	77	77

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 85137

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 1167 lm x 0.789 = 921 lm
Total Light Output per Foot: 292 lm/ft x 0.789 = 230 lm/ft.
watts/foot: 3.8 W/ft.

$$\text{Efficacy} = \frac{292 \frac{\text{lm}}{\text{ft.}}}{3.8 \frac{\text{W}}{\text{ft.}}} = 61 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Recessed

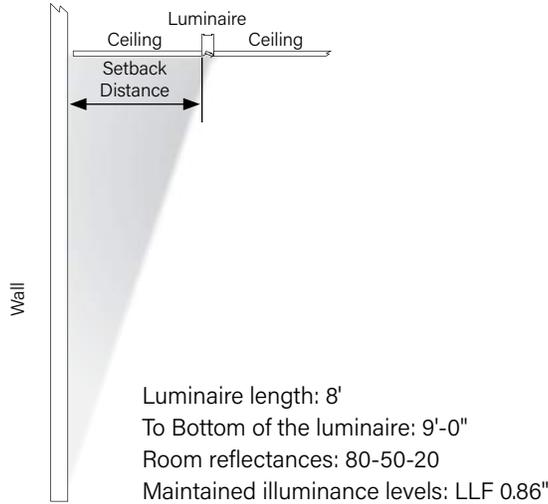
WALL WASH RECESSED - SETBACK INFO AND APPLICATION DATA

HP2-R-WW-D-K-4'-V-835

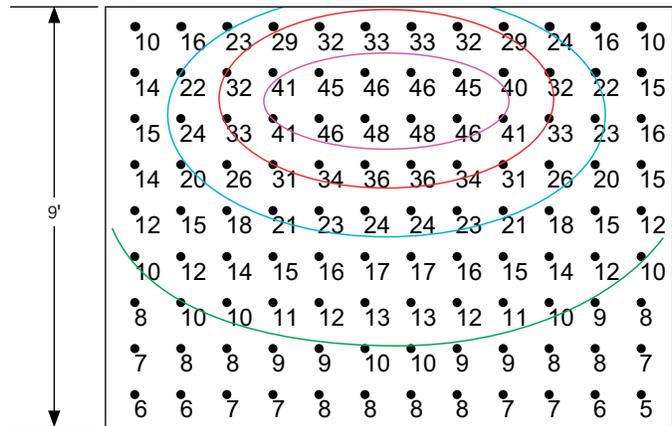
Downlight: With Kicker

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

CRI: 80 / CCT: 3500K



Setback Distance - 2'



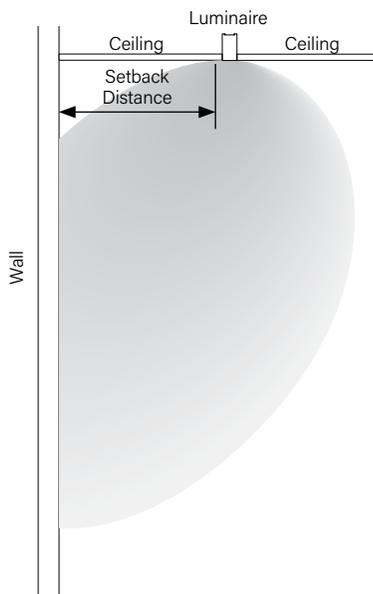
DOWNLIGHT ASYMMETRIC OPTIC - SETBACK INFO AND APPLICATION DATA

HP2-R-D-4ft-V-835-DAO

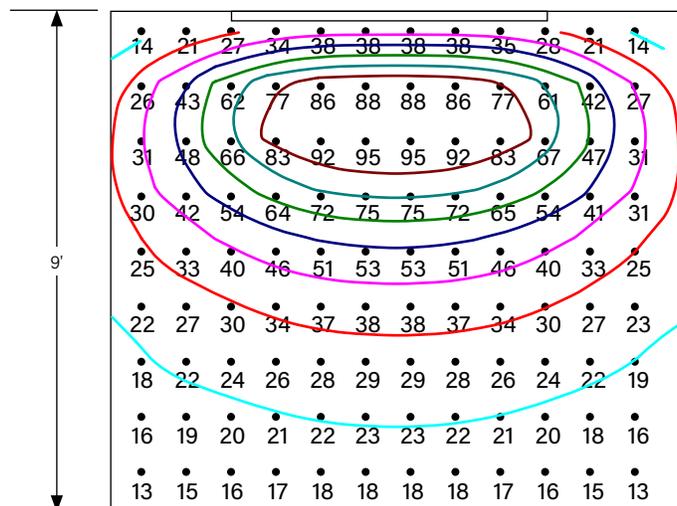
Downlight: DAO

Total luminaire output: 3742 lumens (936 lm/ft)
35.6 watts (8.9 W/ft)

CRI: 80 / CCT: 3500K



Setback Distance - 2'



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

0-10V Tunable White

Finelite's contractor friendly Tunable White luminaires are available at low cost, with powerful and simple 0-10V tuning and intensity controls.

TUNABLE WHITE FEATURES

- CCT range: 2700K - 6500K
- Dimming Range: 100% to 10%
- CRI Options: 80 CRI or 90 CRI

Note:

Dim to Off options available.

LUMINAIRE FAMILY MODIFICATIONS/RESTRICTIONS

Recessed Direct	Section Lengths											
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	
Output S,B,H,V Single Circuit	Rows can be comprised of 2'-12' sections. Tailored lengths available.											
Integral Battery Backup (BSL310LP)							✓		✓		✓	

PHOTOMETRY

Apply a power adjustment factor to calculate wattage usage

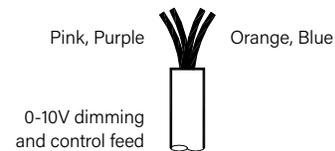
POWER	CONVERSION FACTOR
	1.1X

(Example: a 50 watt luminaire in static white would draw 55 watts using 0-10V Tunable White)

DUAL FEED DETAIL



WIRING LEGEND		
Black	Hot	Line Voltage
White	Neutral	Line Voltage
Green	Ground	

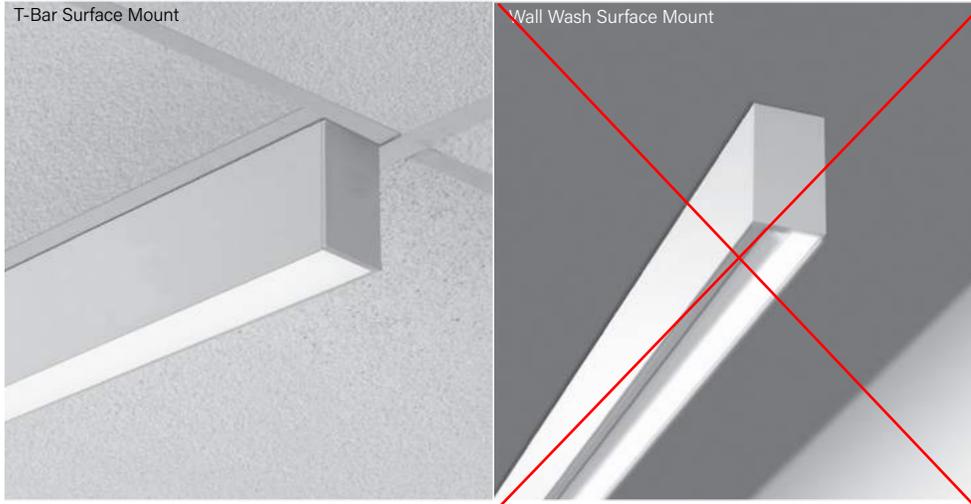


WIRING LEGEND		
Pink	Dimming	0-10V DC
Purple	Dimming	0-10V DC
Orange	TW	0-10V DC
Blue	TW	0-10V DC



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount



High Performance 2" Aperture is a patented, linear LED luminaire family. HP-2 delivers excellent performance using an advanced optical design and mid-power LEDs. Achieving 90% of initial light output at 100,000+ hours and backed by a 10-year performance-based warranty on all standard components.

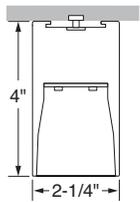
This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

Signal White is standard finish

Note: see page 6 for all aesthetic options

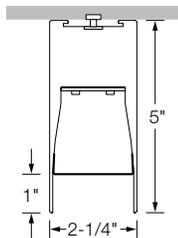
CROSS SECTIONS

Surface Mount



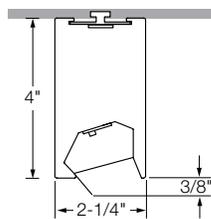
Flush Downlight Diffuser (standard)

Surface Mount Regressed



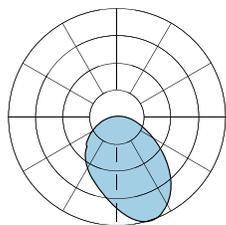
Flat Diffuser with 1" Regressed (RG)

Wall Wash Surface Mount

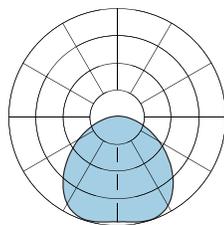


Kicker (standard)

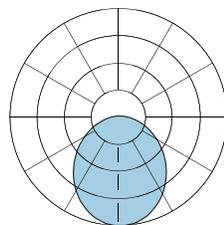
OPTIC OPTIONS



Downlight Asymmetric Optic (DAO)



Downlight Spread Optic (DSO)



Standard Downlight Flush Optic (F)

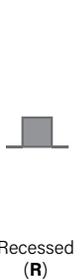
ALSO AVAILABLE IN



Pendant (D, ID, I)



Wall Mount (WM)



Recessed (R)



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

Ordering Guide Example: HP - 2 - SM - D - 36' - S - 835 - F - 96LG - 120 - SC - FC-10% - FA50 - C1 - FE - SW - LGD18W - OBO - CP

BODY TYPE

OUTPUT AND LED TYPE

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Run	Downlight Output (Flush)
HP - High Performance	2	SM - Surface Mount SM RG - Direct Regressed (Wall Wash not available)	D - Direct WW-D - Wall Wash Direct	Minimum 2' section length. Increments accurate to 1/16" (±1/32"), standard. 12' maximum section length.	S - Standard (329 lm/ft) B - Boosted (414 lm/ft) H - High (625 lm/ft) V - Very High (804 lm/ft) TL - Tailored: _____ lm/ft*

Lumen provide are for Flush lens only, see pg. 9 for WW lumens
* Specify Tailored lm/ft of outputs between Standard (S) and Very High (V). Consult factory for tailored lumen output outside of this range.

OUTPUT AND LED TYPE

MECHANICAL/OPTICAL OPTIONS

ELECTRICAL OPTIONS

LED CRI/CCT	Downlight	Reflector System	Voltage	Circuiting ³
830 - 80 CRI, 3000K 835 - 80 CRI, 3500K 840 - 80 CRI, 4000K 930 - 90 CRI, 3000K 935 - 90 CRI, 3500K 940 - 90 CRI, 4000K 8TW - 80 CRI, Tunable White 9TW - 90 CRI, Tunable White	F - Flush (standard) ¹ BG - Bottom Glow ¹ DL - 1" Drop Down Lens ¹ RG-D - Flat Diffuser with 1" Regress ² RG-WCB - White Cross Blade Baffle ² RG-LHE - Hollowed Ellipse Louver ² RG-LHC - Hex Louver ² DAO-L - Downlight Asymmetric Optic Left ^{1,5} DAO-R - Downlight Asymmetric Optic Right ^{1,5} DSO - Downlight Spread Optic ^{1,5} K - Kicker for Wall Wash only (standard) ⁶ FO - Fully Open for Wall Wash only	96LG - 96 Low Gloss White SW - Signal White for Wall Wash only	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage (OTI only)	SC - Single Circuit* One single circuit in a run MC - Multi-Circuit* More than one switch leg or zone. Factory shop drawings required

* Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)

ELECTRICAL OPTIONS

Driver Selection

0-10V Driver Options

- FC-10% - 0-10V 10% (standard)
- FC-1% - 0-10V 1%
- OTI-10% - EldoLED OTi, 0-10V 10%⁴
- OTI-1% - EldoLED OTi, 0-10V 1%⁴
- ELD-10V-0% - EldoLED SOLOdrive, 0-10V 0.1%
- 10V-TW-10% - EldoLED OTi, 0-10V 10% (Tunable White)⁴

DALI Driver Options

- FC-DALI-1% - DALI 1%
- DXL-DALI-1% - EldoLED Dexal, 1%
- ELD-DALI-0% - EldoLED SOLOdrive, 0.1%
- ELD-DALI-TW - EldoLED DUALdrive LightShape, 0.1% (Tunable White)

DMX Driver Options

- ELD-DMX - EldoLED POWERdrive, 0.1%
- ELD-DMX-TW - EldoLED POWERdrive, 0.1% (Tunable White)

Lutron Driver Options

- LUT-ES1 - Lutron, Ecosystem 1%
- LUT-TW - Lutron LD2 Dali-2 1% (Tunable White)

See Page 3 for additional driver options and details

MOUNTING OPTIONS

OTHER OPTIONS

Ceiling Hardware Type	Endcap Style	Finish
C1 - 15/16" T-Bar C2 - 9/16" T-Bar C3 - Screw Slot C4 - Hard Ceiling	FE - Flat Endcap (standard) DE - 1" Drop Endcap ⁸ OE - Open Endcap ⁹	SW - Signal White (standard) FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code ¹⁰ _____

Emergency Style (Optional)

See page 5 Backup Battery table

- LGD18W - Legrand 18W Brand Battery Back-up
- LGD10W - Legrand 10W Brand Battery Back-up
- EM/GN - Emergency to Generator
- NL - Night Light
- BSL310LP - Bodine Battery Back up Low Profile
- BSL10T3 - Bodine Battery Back up Low Profile Compact
- GTD - Generator Transfer Device
- ALCR - Automatic Load Control Relay

Integrated Sensor (Optional)¹¹

- OBO - Occupancy¹²
- OBD - Daylight¹²
- W601 - Wattstopper Wireless Sensor¹³
- OBE - Enlighted¹⁴
- REE - Remote Enlighted¹⁵
- CLM - Encelium RF
- SLM - Encelium Sensor
- AOCC-W - Lutron Athena Sensor (Device Color White)¹⁶
- AOCC-B - Lutron Athena Sensor (Device Color Black)¹⁶
- ARF-W - Lutron Athena RF (Device Color White)¹⁶
- ARF-B - Lutron Athena RF (Device Color Black)¹⁶
- VOCC - Lutron Vive Wireless Sensor (VDO)¹⁷
- VRF - Lutron Vive Radio Only¹⁷

Special Options (Optional)

- CP - Chicago Plenum¹⁸
- RLA - Red List Approved
- RLD - Red List Declared

¹ Not available with Wall Wash

² Regressed only

³ Contact factory for switching options

⁴ Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO)

⁵ Not available with Regressed or Curves

⁶ Kicker standard in Signal White. Customer Custom color kickers have a surcharge

⁷ B & V outputs only

⁸ 1" Drop Down Lens downlight only

⁹ Available with Hollowed Ellipse Louver (LHE) only

¹⁰ 20 business days lead time for color

¹¹ Minimum fixture length with a sensor is 3ft.

¹² Not available with Wall Wash

¹³ LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected.

¹⁴ LMFS-601 w/ Dali driver, only 1 driver can be connected.

¹⁵ Enlighted components installed by Finelite, provided by others

¹⁶ Enlighted for Wall Wash fixtures. Enlighted Control Unit & Sensor Cable installed for Remote mounting sensor.

¹⁷ 0-10V Drivers - AOCC up to 10 drivers may be connected; ARF up to 40 drivers may be connected. DALI Drivers - AOCC & ARF up to 4 drivers can be connected.

¹⁸ Lutron Vive Integrated Sensors require a DALI driver

¹⁹ Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

SUPPLEMENTARY DRIVER PAGE

0-10V Driver Options

FC-10%	Factory Choice, 0-10V 10% Dimming (Linear)
FC-10%-DTO	Factory Choice, 0-10V 10% Dimming, Dim-to-Off (Linear)
FC-1%	Factory Choice, 0-10V 1% Dimming (Linear)
FC-1%-DTO	Factory Choice, 0-10V 1% Dimming, Dim-to-Off (Linear)
ELD-10V-0%	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
ELD-10V-1%	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
10V-TW-10%	EldoLED OTi, 0-10V 10% Dimming, Tunable White (Linear)
10V-TW-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, Tunable White (Linear)
OTi-10%	EldoLED OTi, 0-10V 10% Dimming (Linear)
OTi-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
OTi-1%	EldoLED OTi, 0-10V 1% Dimming (Linear)
OTi-1%-DTO	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

DALI Driver Options

FC-DALI-1%	Factory Choice, DALI 1% Dimming (Logarithmic)
DXL-DALI-1%	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
ELD-DALI-0%	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
ELD-DALI-1%	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)
ELD-DALI-TW	EldoLED DUALdrive Light Shape, DALI 0.1% Dimming, Tunable White (Logarithmic Dimming, Linear CCT Control)

DMX Driver Options

ELD-DMX	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
ELD-DMX-16	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)
ELD-DMX-TW	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (8 Bit, 2CH - CH1 Warm / CH2 Cool) (Linear)
ELD-DMX-TW16	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (16 Bit, 4CH - CH1, 2 Warm / CH3, 4 Cool) (Linear)

Lutron Driver Options

LUT-ES1	Lutron, Ecosystem 1% Dimming
LUT-TW	Lutron LD2 Dali-2 1%, Tunable White

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

SPECIFICATIONS

BODY TYPE

CONSTRUCTION: Precision-cut 6063-T6 extruded aluminum body. Internal joiner system and plug-together wiring are standard.

LENGTHS: Any length, 2' minimum, in increments down to 1/16th" (±1/32"). 12' maximum section length. Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**), and White Cross Blade Baffle (**WCB**) are available in 1' increments.

MITERED CORNERS¹: Illuminated corners of greater than 60° and less than 180° in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, Regressed Diffuser, or White Cross Blade Baffle². Corners not available with Wall Wash (**WW-D**), Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**) or 1" Drop Down Lens. Contact factory for Double miters using the White Cross Blade Baffle. Consult factory for tailored lighting options.

OUTPUT AND LED TYPE

LIGHT OUTPUT: Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). For lengths 3' and greater, the uplight and downlight can be specified with different lumen packages and dual controls. For Tailored Outputs outside of range from Standard (**S**) to Very High (**V**), consult factory. Light engines are replaceable.

MECHANICAL/OPTICAL OPTIONS

DOWNLIGHT OPTION: 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Available with Flush (**F**), Bottom Glow (**BG**), 1" Drop Down Lens (**DL**), White Cross Blade Baffle (**WCB**)³, Ellipse Louver (**LHE**)³, Hex Louver (**LHC**)³, Downlight Asymmetric Optic (**DAO**)⁴, Downlight Spread Optic (**DSO**)⁴, and Regressed downlight diffusers (**RG**). 1" Drop Down Lens made of highly efficient acrylic. Available with a solid endcap or an endcap with a diffuse filler to continue the luminous aesthetic. Downlight Spread & Downlight Asymmetric Optics are extruded lenses with a subtle ribbed appearance providing a batwing or asymmetric distribution for improved optical performance. Consult factory for more tailored lumen outputs.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

REFLECTORS: Die-formed 20-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint. The standard Semi-Specular Aluminum (**SSA**) Kicker (**K**) reflector delivers light high on the vertical surface. The Kicker reflector can be easily removed for open distribution (**FO**).

ELECTRICAL OPTIONS

STATIC WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed controlling uplight and downlight together (power and dimming). Specify dual feeds for independent control of uplight and downlight. 14-gauge feed used when luminaire current exceeds 5 amps.

TUNABLE WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when fixture current exceeds 5 amps. DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

0-10V:

- One 18-gauge / 3-conductor power
- One 18-gauge / 4-conductor for dimming and controls

Dali:

- One 18-gauge / 5-conductor power and controls

DMX:

- One 18-gauge / 3-conductor power
- One DMX feed

STATIC WHITE DRIVER: Replaceable 120V, 277V, and 347V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%- 100% standard. Dimming to 1% available. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

- **Power Factor:** ≥ 0.9
- **Total Harmonic Distortion (THD):** <20%
- **Expected driver lifetime:** 100,000 hours

LUTRON DRIVER OPTIONS:

LUT-ES1 - Hi-lume 1% EcoSystem with Soft-On, Fade-to-Black dimming (LDE1 series).

TUNABLE WHITE DRIVER: Replaceable LED driver. Driver is accessible from below the ceiling. 120V and 277V.

- **Power factor:** ≥0.90
- **Total Harmonic Distortion (THD):** <20%
- **Dimming Range:** 100%-10%
- **Expected driver lifetime.:** 100,000 hours

LUTRON TUNABLE WHITE DRIVER OPTION:

LUT-TW - Lutron LD2 Dali-2 1%, Tunable White.

MOUNTING OPTIONS

HANGING HARDWARE: Lay-in ceiling types: caddy clip with 1/4" - 20 stud and nut. Drywall or concrete surfaces (walls or ceilings): 1/4" - 20 stud and nut (provided by others). Mounted with three equidistant suspension points.

TUNABLE WHITE DMX HANGING HARDWARE: For grid ceiling applications the dual GridBox™ mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5' (standard), 12', and 30'.

¹ Not available with Wall Wash

² White Cross Blade (WCB) baffles not available with custom angles. Available in 90 degrees only

³ Regressed only

⁴ Not available with Regressed or Curves

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

SPECIFICATIONS

TUNABLE WHITE DMX INTERCONNECTION CABLES: Luminaires are prewired with plug-and-play interconnected cables to support easy plug-together joining of fixture runs. DMX to RJ45 adapters and an RJ45 terminator for every 32 DMX drivers are included.

OTHER FEATURES

ENDCAPS: Flat diecast aluminum endcaps (**FE**) add 1/4" to each end of luminaire. 1" Drop Down Lens Endcap (**DE**) includes diffuse element to continue luminance of drop lens. Open Endcap (**OE**) is for use with the Hollowed Ellipse Louver (**LHE**)⁵; following the curve of the louver.

EMERGENCY STYLE: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery.

Backup Battery

	Legrand 18W	Legrand 10W/ Bodine BSL310LP
HP2-SM-D		
Min. Housing Length	8*	6*
EM Lumen Output	1608	956
EM Section Illuminated	2'	2' or 4'
HP2-SM-WW-D		
Min. Housing Length	8*	4*
EM Lumen Output	1500	891
EM Section Illuminated	4'	4'

* Minimum fixture housing length for battery pack approved without sensor.
The lumens are based on 835. For other CCT/CRI, refer to the Lumen Adjustment Factor table on page 8

Bodine GTD and Legrand ALCR Min. Length

Configuration	Min Length
Generator	6'
Generator + OCC	8'
Daylight	6'
Generator + Daylight	8'

Tunable White ELECTRICAL OPTIONS⁶:

TW Driver Options

- **0-10V:** EM/GEN, GTD or Battery Back Up
- **DMX:** Battery Back Up
- **DALI:** EM/GEN, GTD or Battery Back Up
- **LUTRON:** EM/GEN, GTD or Battery Back Up

⁵ Regressed only

⁶ Consult Finelite for Generator Transfer Device and Battery Back up fit

⁷ 20 business days lead time for color

⁸ Excludes Battery Back up and Generator Transfer Device weight

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) Occupancy (**OBO**) or Daylight Sensors (**OBD**) available with Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options. Minimum fixture length: Direct and Indirect with a sensor is 3ft. The default location for the Connected Lighting Module (**CLM**) will be on the topside of the fixture for all mounting types except for Surface Mount (**SM**). In SM fixtures the CLM will be located on the direct side of fixture housed in a bracket that is flush with the direct lens.

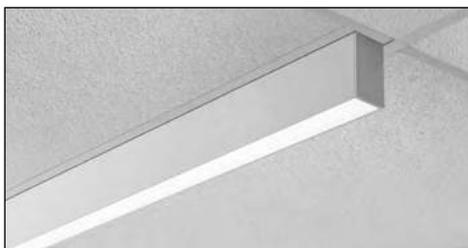
FINISHES: Finelite Signal White (**SW**) powder coat, Finelite Black (RAL 9005) with semi gloss fine texture (**FB**), and Satin Aluminum (**SA**) are standard. Optional Adder: 179 RAL colors⁷ are available.

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 - PoE options available on request. These fixtures are rated for Damp Location. HP-2 can be used to comply with 2016 Title 24, Part 6 (JA8); high efficacy LED light source requirements. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/863. Consult factory for tailored lighting options. Finelite makes the specification process easy when putting healthier products on your projects. Simply add - **RLA** (Red List Approved) or - **RDL** (Red List Declared) to your part number.

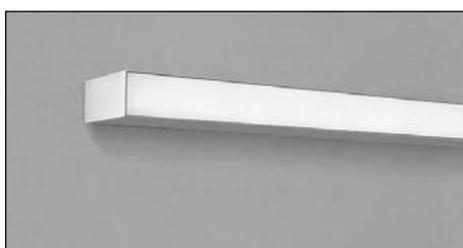
WEIGHT⁸: SM - 2.3 lb/ft; WW - 2.9 lb/ft

WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

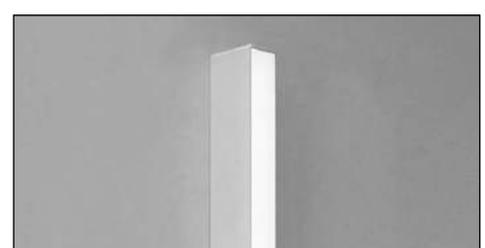
SURFACE MOUNT OPTIONS



Ceiling Surface Mount



Horizontal Surface Mount



Vertical Surface Mount

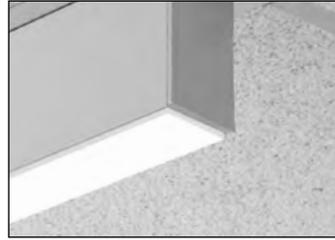
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

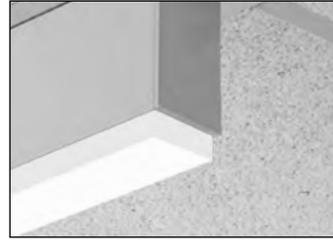
AESTHETIC OPTIONS



Flush Diffuser (**F**)



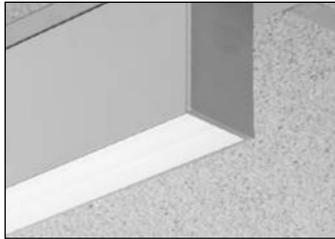
Bottom Glow Diffuser (**BG**)



1" Drop Down Lens (**DL**)



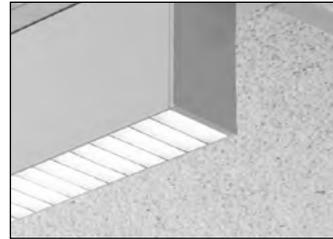
Flat Diffuser with 1" Regressed (**RG-D**)



Downlight Asymmetric Optic (**DAO**)¹
Externally flush



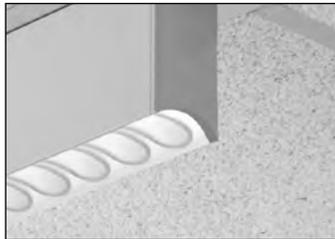
Downlight Spread Optic (**DSO**)¹
Externally flush



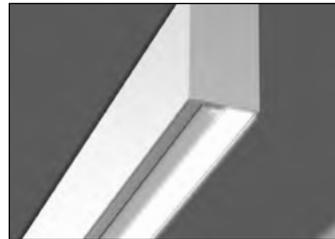
White Cross Blade Baffle² (**RG-WCB**)



Hex Louver² (**RG-LHC**)



Hollowed Ellipse Louver² (**RG-LHE**)



Kicker (**K**) - Wall Wash only

¹ With a subtle ribbed appearance providing specialized distribution
² Regressed only. Not available with Wall Wash

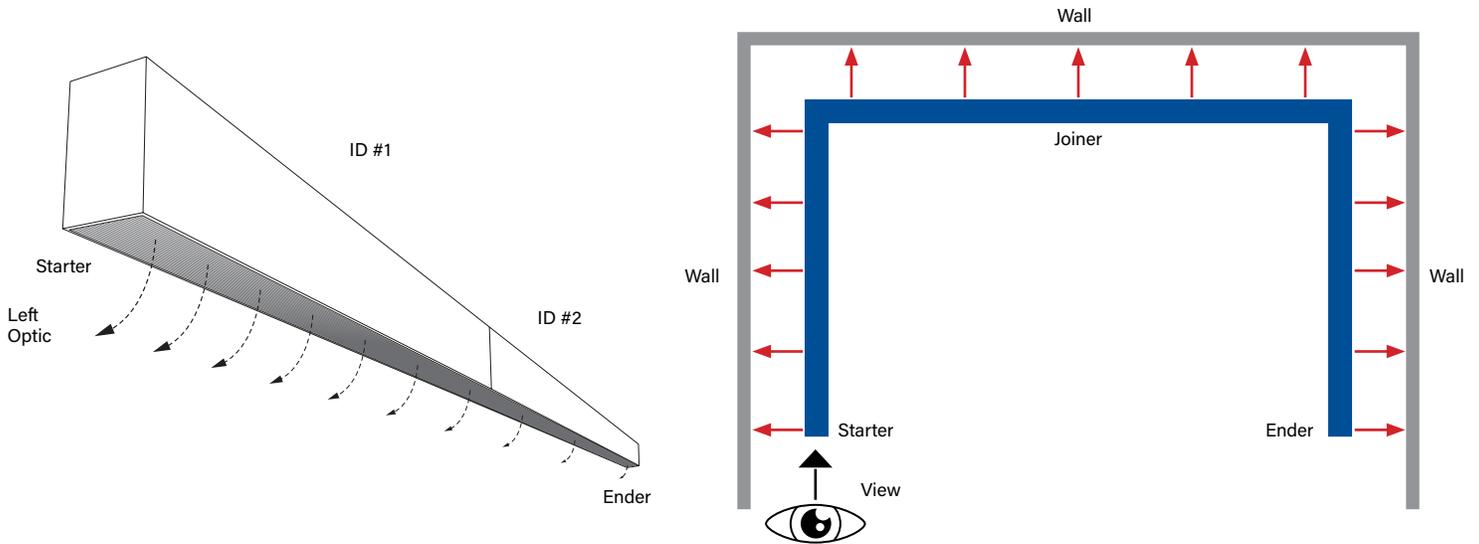
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

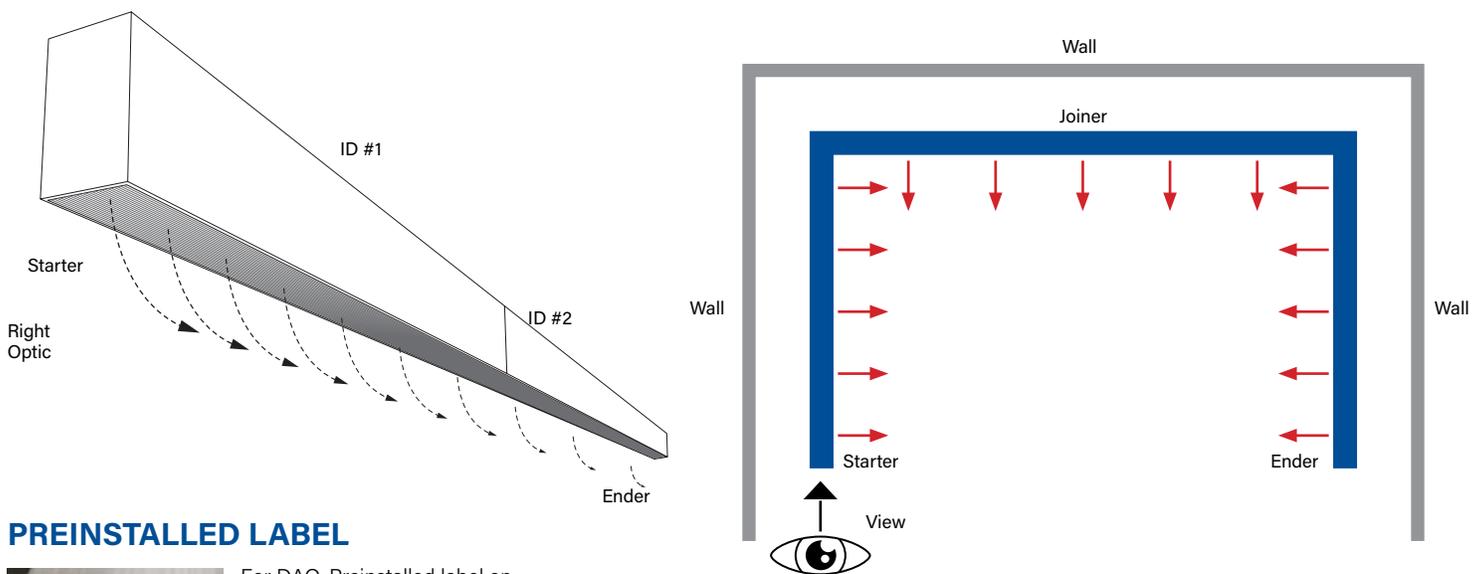
DOWNLIGHT ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying DAO-L distributes light to the left or right. For proper orientation: view luminaire from starter end when specifying the direction of the Downlight Asymmetric optic.

Downlight Asymmetric Optic Left (DAO-L)



Downlight Asymmetric Optic Right (DAO-R)



PREINSTALLED LABEL



For DAO, Preinstalled label on diffuser shows direction of light. Remove after installation.

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

Recessed Photometry - 4' Luminaire 3500K

HP2-SM-D-4'-V-835-DAO

Downlight: Downlight Asymmetric Optic - Right

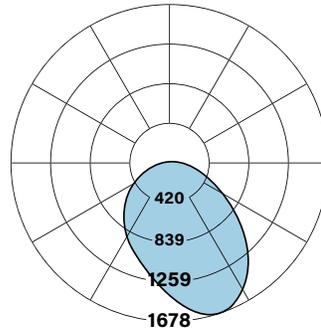
Efficacy: 105 lm/W

Total luminaire output: 3741 lumens (935 lm/ft)
35.5 watts (8.9 W/ft)

Peak Candela Value: 1670 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report REP-051921-01



HP2-SM-D-4'-V-835-DSO

Downlight: Downlight Spread Optic

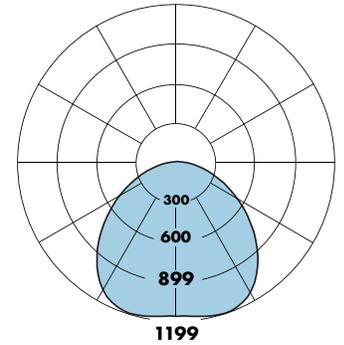
Efficacy: 92 lm/W

Total luminaire output: 3273 lumens (818 lm/ft)
35.7 watts (8.9 W/ft)

Peak Candela Value: 1197 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report 94139



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1531	1925	2910	3741

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
383	481	727	935

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
110	109	107	105

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: REP-051921-01

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1340	1684	2546	3273

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
335	421	636	818

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.5	4.4	6.8	8.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
96	95	93	92

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 94139

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI

Lumen Adjustment Factor: 0.789

Total Light Output: 2910 lm x 0.789 = 2296 lm

Total Light Output per Foot: 707 lm/ft x 0.789 = 574 lm/ft.

watts/foot: 6.8 W/ft.

$$\text{Efficacy} = \frac{574 \frac{\text{lm}}{\text{ft.}}}{6.8 \frac{\text{W}}{\text{ft.}}} = 84 \text{ lm/W}$$

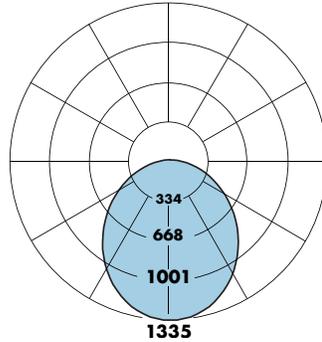
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

Recessed Photometry - 4' Luminaire 3500K

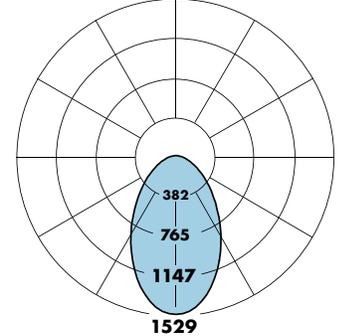
HP2-SM-D-4'-V-835
Downlight: Flush Diffuser

Efficacy: 89 lm/W
Total luminaire output: 3287 lumens (822 lm/ft)
36.9 watts (9.2 W/ft)
Peak Candela Value: 1335 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 85135



HP2-SM RG-D-4'-V-835
Downlight: Regressed Diffuser

Efficacy: 79 lm/W
Total luminaire output: 2887 lumens (722 lm/ft)
36.7 watts (9.2 W/ft)
Peak Candela Value: 1529 @ 0°
CRI: 80 / CCT: 3500K
ITL LM79 Report 90350



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1346	1692	2557	3287

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
336	423	639	822

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
93	92	90	89

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
1182	1486	2245	2887

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
295	371	561	722

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
3.6	4.6	7.0	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
82	81	80	79

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 85135

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 90350

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 2557 lm x 0.789 = 2017 lm
Total Light Output per Foot: 639 lm/ft x 0.789 = 504 lm/ft.
watts/foot: 71 W/ft.

$$\text{Efficacy} = \frac{504 \frac{\text{lm}}{\text{ft.}}}{7.1 \frac{\text{W}}{\text{ft.}}} = 71 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

Wall Wash Recessed - 4' Luminaire 3500K

HP2-SM-WW-D-K-4'-V-835

Downlight: With Kicker

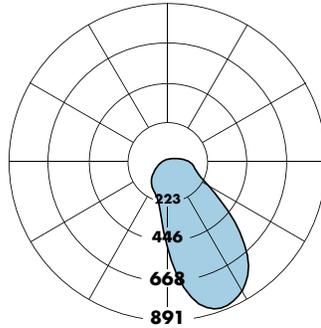
Efficacy: 76 lm/W

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

Peak Candela Value: 882 @ 25°

CRI: 80 / CCT: 3500K

ITL LM79 Report 85137



Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S ¹	B ¹	H ¹	V ²
614	772	1167	1500

Light Output, 3500K, 80 CRI (Lumens Per Foot)

S ¹	B ¹	H ¹	V ²
154	193	292	375

Power, 3500K (Watts Per Foot)

S ¹	B ¹	H ¹	V ²
2.0	2.5	3.8	4.9

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S ¹	B ¹	H ¹	V ²
76	77	77	77

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 85137

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI	
3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / 4000K, 90 CRI
Lumen Adjustment Factor: 0.789
Total Light Output: 1167 lm x 0.789 = 921 lm
Total Light Output per Foot: 292 lm/ft x 0.789 = 230 lm/ft.
watts/foot: 3.8 W/ft.

$$\text{Efficacy} = \frac{292 \frac{\text{lm}}{\text{ft.}}}{3.8 \frac{\text{W}}{\text{ft.}}} = 61 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

High Performance 2" Aperture (HP-2) Surface Mount

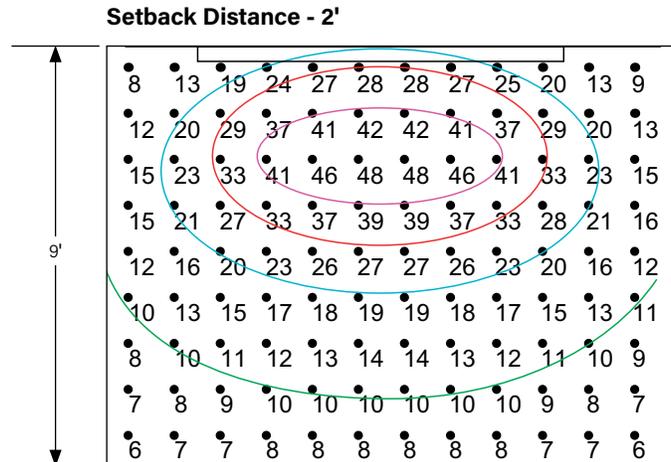
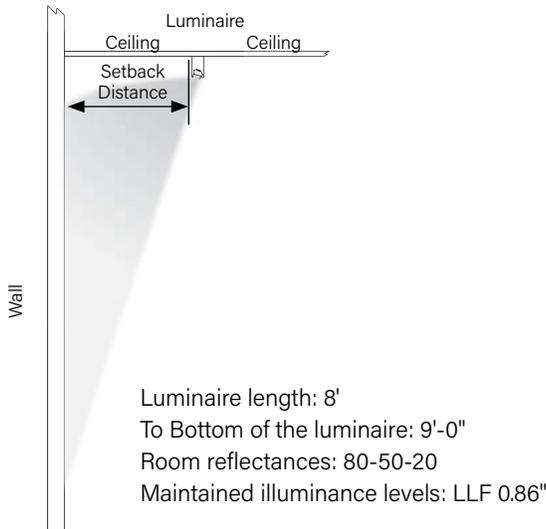
WALL WASH RECESSED - SETBACK INFO AND APPLICATION DATA

HP2-SM-WW-D-K-4'-V-835

Downlight: With Kicker

Total luminaire output: 1500 lumens (375 lm/ft)
19.6 watts (4.9 W/ft)

CRI: 80 / CCT: 3500K



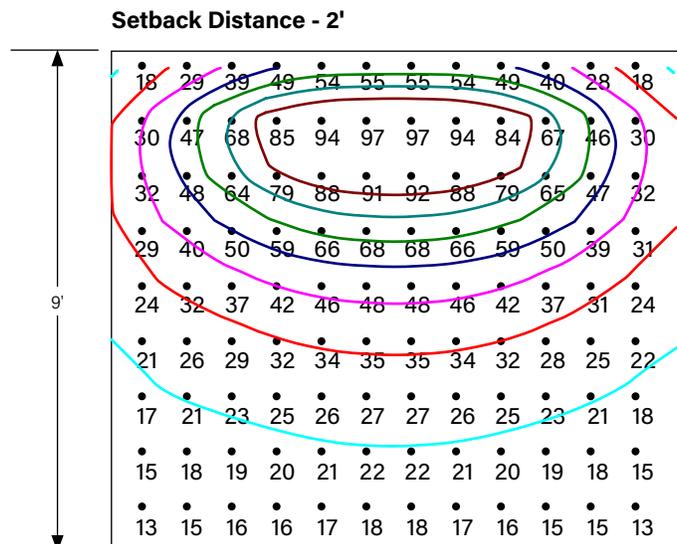
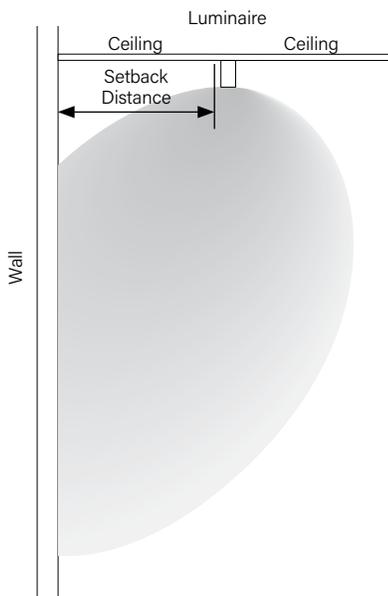
DOWNLIGHT ASYMMETRIC OPTIC - SETBACK INFO AND APPLICATION DATA

HP2-SM-D-4ft-V-835-DAO

Downlight: DAO

Total luminaire output: 3742 lumens (936 lm/ft)
35.6 watts (8.9 W/ft)

CRI: 80 / CCT: 3500K



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

0-10V Tunable White

Finelite's contractor friendly Tunable White luminaires are available at low cost, with powerful and simple 0-10V tuning and intensity controls.

TUNABLE WHITE FEATURES

- CCT range: 2700K - 6500K
- Dimming Range: 100% to 10%
- CRI Options: 80 CRI or 90 CRI

Note:

Dim to Off options available.

LUMINAIRE FAMILY MODIFICATIONS/RESTRICTIONS

Surface Mount Direct	Section Lengths											
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	
Output S,B,H,V Single Circuit	Rows can be comprised of 3'-12' sections. Tailored lengths available.											
Integral Battery Backup (BSL310LP)							✓		✓		✓	

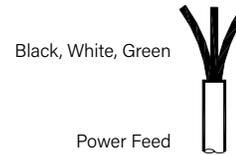
PHOTOMETRY

Apply a power adjustment factor to calculate wattage usage

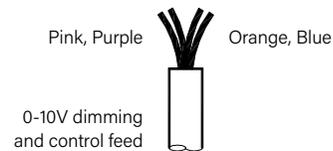
POWER	CONVERSION FACTOR
	1.1X

(Example: a 50 watt luminaire in static white would draw 55 watts using 0-10V Tunable White)

DUAL FEED DETAIL



WIRING LEGEND		
Black	Hot	Line Voltage
White	Neutral	Line Voltage
Green	Ground	



WIRING LEGEND		
Pink	Dimming	0-10V DC
Purple	Dimming	0-10V DC
Orange	TW	0-10V DC
Blue	TW	0-10V DC



Day-Brite

CFI

by Signify

Industrial

VTC Sealed strip

4ft, 3600 lumens

Type W1



Day-Brite/CFI VTC Sealed strip is a durable wet location rated product designed for use in both indoor and outdoor environments. This luminaire offers rugged reliability and the efficiency your successful business requires.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lumens: _____ Qty: _____

Notes: _____

Ordering guide

Example: VTC436L840-UNV

Series	Length (nominal)	Lumens ¹ (nominal)	Color temp. (K)	Voltage
VTC	4	36L	840 –	UNV
VTC Sealed strip LED	4 4' length	36L 3600 lumens	840 80 CRI, 4000K	UNV Universal voltage 120-277V (non-dimmable)

1. Nominal delivered lumens at 25°C ambient.

All options are factory installed.

Many luminaire components, such as reflectors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Features

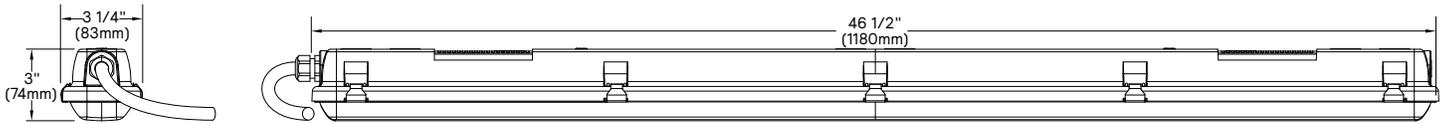
- Grey one piece, molded polycarbonate body. No rusting, no oxidation, and no corrosion.
- Standard lens is frosted.
- Gasket provides tight seal between plastic lens and housing.
- Stainless steel latches are standard.
- Hanging V hooks included (set of 2).
- Wrap around mounting brackets included (set of 2).
- IP65 rated
- cULus listed to meet UL 1598 standards for -10C to 40C ambient. Suitable for wet locations.
- 5 Year Limited Warranty



VTC Sealed strip LED

4ft, 3600 lumens

Dimensions



Photometry

4' VTC Sealed strip LED, 3600 nominal delivered lumens

Catalog No.	VTC436L840-UNV	Candlepower					Light Distribution			Average Luminance						
Test No.	6046530.50P	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross			
S/MH	1.3	0	1054	1054	1054	1054	0-30	821	22.5	45	1008	822	811			
Lamp Type	LED	5	1053	1047	1046	1048	0-40	1351	37.1	55	961	757	759			
Lumens	3644	15	1014	999	1000	1001	0-60	2449	67.2	65	889	684	702			
Input Watts	35	25	938	918	924	926	0-90	3416	93.7	75	756	605	642			
LPW	104	35	830	813	830	820	0-180	3644	100.0	85	483	510	581			
		45	697	691	725	699	90-180	228	6.3							
		55	544	559	608	567	Coefficients of Utilization									
		65	376	420	479	428	EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
		75	202	285	349	290	pcc	80			70			50		
		85	50	160	226	163	pw	70	50	30	70	50	30	50	30	
		95	13	98	154	98	RCR									
		105	8	59	110	59	0	118	118	118	114	114	114	108	108	
		115	2	21	65	21	1	105	100	95	102	97	92	91	88	
		125	2	3	22	3	2	95	86	79	92	84	77	79	73	
		135	2	2	3	2	3	86	75	66	83	73	65	69	62	
		145	2	2	2	2	4	79	66	57	76	64	56	61	54	
		155	3	3	3	3	5	72	59	49	70	57	49	54	47	
		165	3	3	3	3	6	67	53	44	64	52	43	49	41	
		175	4	4	3	3	7	62	48	39	60	47	38	45	37	
							8	57	44	35	55	43	34	41	33	
							9	54	40	31	52	39	31	37	30	
							10	50	37	29	49	36	28	35	28	

Comparative yearly lighting energy cost per 1000 lumens – \$2.31 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.



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www.day-brite.com

Day-Brite

CFI

by Signify

Industrial

VTC Sealed strip

4ft, 3600 lumens

Type ZS1



Day-Brite/CFI VTC Sealed strip is a durable wet location rated product designed for use in both indoor and outdoor environments. This luminaire offers rugged reliability and the efficiency your successful business requires.

Project: _____
Location: _____
Cat.No: _____
Type: _____
Lumens: _____ Qty: _____
Notes: _____

Ordering guide

Example: VTC436L840-UNV

Series	Length (nominal)	Lumens ¹ (nominal)	Color temp. (K)	Voltage
VTC	4	36L	840 –	UNV
VTC Sealed strip LED	4 4' length	36L 3600 lumens	840 80 CRI, 4000K	UNV Universal voltage 120-277V (non-dimmable)

1. Nominal delivered lumens at 25°C ambient.

All options are factory installed.

Many luminaire components, such as reflectors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

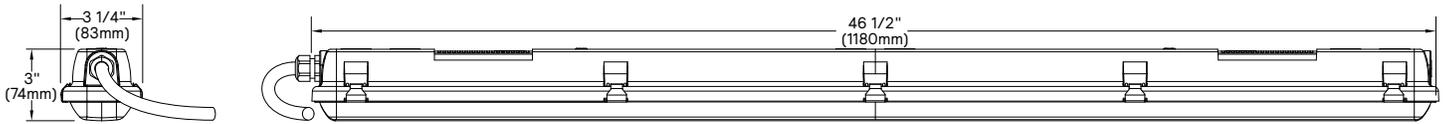
Features

- Grey one piece, molded polycarbonate body. No rusting, no oxidation, and no corrosion.
- Standard lens is frosted.
- Gasket provides tight seal between plastic lens and housing.
- Stainless steel latches are standard.
- Hanging V hooks included (set of 2).
- Wrap around mounting brackets included (set of 2).
- IP65 rated
- cULus listed to meet UL 1598 standards for -10C to 40C ambient. Suitable for wet locations.
- 5 Year Limited Warranty

VTC Sealed strip LED

4ft, 3600 lumens

Dimensions



Photometry

4' VTC Sealed strip LED, 3600 nominal delivered lumens

Catalog No.	VTC436L840-UNV	Candlepower				Light Distribution			Average Luminance							
Test No.	6046530.50P	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross			
S/MH	1.3	0	1054	1054	1054	1054	0-30	821	22.5	45	1008	822	811			
Lamp Type	LED	5	1053	1047	1046	1048	0-40	1351	37.1	55	961	757	759			
Lumens	3644	15	1014	999	1000	1001	0-60	2449	67.2	65	889	684	702			
Input Watts	35	25	938	918	924	926	0-90	3416	93.7	75	756	605	642			
LPW	104	35	830	813	830	820	0-180	3644	100.0	85	483	510	581			
		45	697	691	725	699	90-180	228	6.3							
		55	544	559	608	567	Coefficients of Utilization									
		65	376	420	479	428	EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
		75	202	285	349	290	pcc	80			70			50		
		85	50	160	226	163	pw	70	50	30	70	50	30	50	30	
		95	13	98	154	98	RCR									
		105	8	59	110	59	0	118	118	118	114	114	114	108	108	
		115	2	21	65	21	1	105	100	95	102	97	92	91	88	
		125	2	3	22	3	2	95	86	79	92	84	77	79	73	
		135	2	2	3	2	3	86	75	66	83	73	65	69	62	
		145	2	2	2	2	4	79	66	57	76	64	56	61	54	
		155	3	3	3	3	5	72	59	49	70	57	49	54	47	
		165	3	3	3	3	6	67	53	44	64	52	43	49	41	
		175	4	4	3	3	7	62	48	39	60	47	38	45	37	
							8	57	44	35	55	43	34	41	33	
							9	54	40	31	52	39	31	37	30	
							10	50	37	29	49	36	28	35	28	

Comparative yearly lighting energy cost per 1000 lumens – \$2.31 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.



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www.day-brite.com

PRE-2-M Serenity Lens LED Specifications



Project Name:

Catalog Number:

Type:

Contemporary design meets the new generation of LED green technology in this stunning luminaire, the **PRE-2-M Serenity Lens**. The PRE-2-M Serenity Lens Array series provides up to fifty percent energy savings over traditional HID light sources; and offers excellent beam control and LED life beyond 100,000 hours. The PRE-2-M Array is offered in five optical distributions.

The PRE-2-M Serenity Lens Arrays fully-sealed housing features an exceptionally well-designed thermal management system that provides superior heat dissipation.

The PRE-2-M Serenity Lens fixture is built with a cast aluminum housing, extruded aluminum arms and a spun aluminum, removable top.

The popular **PRE-2-M Serenity Lens** is the perfect compliment to any university campus, business park, or walkway project where contemporary, architectural design is desired.

Ordering Information

MODEL	OPTICS	LUMENS	KELVIN	VOLTAGE	MOUNTING	FINISH	SERENITY LENS	OPTIONS	OPTIONS
PRE-2-M	T1 T2 T3L T4L T5LS	2L 4L 6L 8L	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V 8 347V 5 480V	PT Post Top *Slips over 3" OD tenon X 4.5" tall as standard	BZ Bronze BK Black SBK Smooth Black WH White SWH Smooth White GP Graphite GY Grey SL Silver Metallic CC Custom Color	LDL Lightly Diffused Lens HDL Highly Diffused Lens	PC-120 PC-208 PC-240 PC-277 Button Type Photocell WSC-8 Motion Sensor 8' Mounting Height WSC-20 Motion Sensor 9-20' Mounting Height WSC-40 Motion Sensor 21-40' Mounting Height the WSC option will require (1) FSIR 100 remote for programming	DIM 0-10v Dimming Driver VWC Visionaire Wireless Controls *Consult Factory IR-(R, B, G) Illuminated Rings (Red, Blue, Green) PER 3, 5, or 7 Pin Photo Receptacle w/shorting cap

Features & Specifications

PRE-2-M Serenity Lens

Housing

The PRE-2-M Serenity Lens' housing is constructed from durable, corrosion-resistant, cast aluminum. The spun aluminum top cap is .080 gauge, and easily removable for service. Silicone gasketing is provided for complete weather and insect protection.

Thermal Management

The PRE-2-M Serenity Lens provides excellent overall thermal management by maximizing the efficiency of the heat sink in the fixture. This enables the PRE-2-M Serenity Lens to withstand higher ambient temperatures and higher drive currents without degrading LED life.

Optical System

- The highest lumen output LEDs are utilized. High-performance acrylic optics feature industry leading Type 1, 2, 3L, 4L, and 5LS optical distributions. Acrylic optics are impact-resistant and rated to 94 percent translucence.
- L70 life of our LEDs is rated over 100,000 hours (for 350 mA), The optical system qualifies as IES full cutoff to restrict light trespass, glare and light pollution for neighborhood-friendly lighting. CRI values are 70.

Quali-Guard® Finish

- Fixture components are chemically pretreated through a multiple-stage washer, and finished with an electrostatically-applied, thermoset polyester powder coat textured paint with a 3 to 5 mils thickness.
- Finish is oven-baked at 400 °F for maximum adherence and finish hardness.
 - Available in standard and custom colors.
 - Finish is guaranteed for five (5) years.

Post Top Mount

The PRE-2-M Serenity Lens contractor-friendly mounting hardware slips over 3" OD tenon X 4.5" tall as standard utilizing stainless steel hardware.

Electrical Assembly

- The PRE-2-M Serenity Lens is supplied with a high-performance driver available in 350, 530 or 700. The driver is integrally-located in the housing, and is operational from 120 V through 480 V, 50 Hz to 60 Hz input.
- Power factor is 90%.
- Rated for -40o to 50° C operation.
- 10 kV surge protector supplied as standard.

Warranty

Five (5) year Limited Warranty on entire system, including finish. For full warranty information, please visit www.visionairelighting.com.

Options

- Button type photocell
 - 0-10v Dimming Driver
 - WattStopper FSP-211
 - Motion Sensor
 - Wireless Control
 - Illuminated Rings
 - Photo Receptacle
- Please consult factory for detailed custom options.

Listings

- PRE-2-M Serenity Lens is cUL listed
- DLC Listed
- IDA Certification
- IP66 Rated
- LM79 and LM80
- Powder Coated Tough™

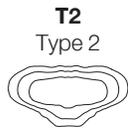
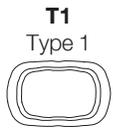


DesignLights Consortium (DLC) qualified Product. Some configurations of this product family may not be DesignLights Consortium (DLC) listed, please refer to the DLC qualified products list to confirm listed configurations. <http://www.designlights.org/> 3000K must be selected for IDA certification.

PRE-2-M Serenity Lens - Electrical Load (A)							
Ordering Nomenclature	System Watts	120V	208V	240V	277V	347V	480V
PRE-2-M-T5LS-2L	22	0.18	0.11	0.09	0.08	0.06	0.05
PRE-2-M-T5LS-4L	43	0.36	0.21	0.18	0.16	0.12	0.09
PRE-2-M-T5LS-6L	70	0.58	0.34	0.29	0.25	0.20	0.15
PRE-2-M-T5LS-8L	97	0.81	0.47	0.40	0.35	0.28	0.20

PRE-2-M Serenity Lens LED Specifications

Photometric Optical Summary

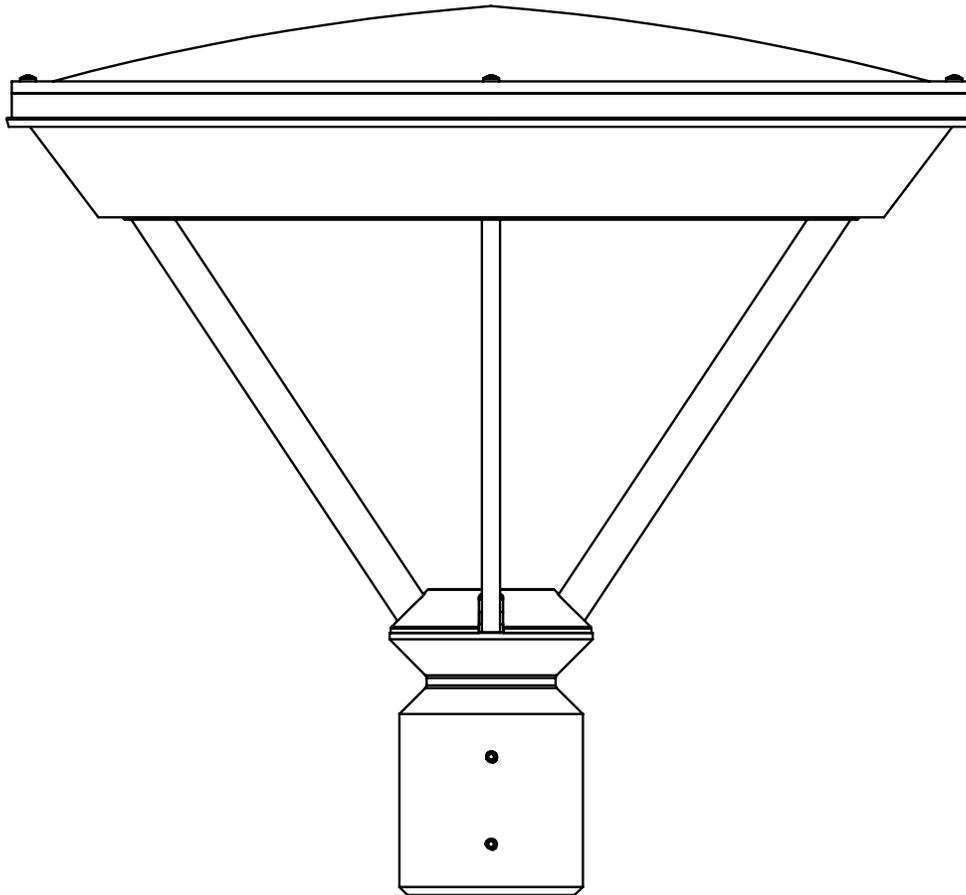


EPA Data


.88

Dimensions

Width:	PRE-2-M 20"
Height:	PRE-2-M 18.4"
Weight:	37 LBS



Motion Sensor Default Setting									
Type	High Mode	Low Mode	Time Delay	Cut off Delay	Sensitivity	Hold Off Set Point	Photocell On/Off	Ramp up Time	Fade Down Time
WSC- Default	10V	1V	5 Min	1 Hour	Max	Disabled	Disabled	Disabled	Disabled
WSC Range	0-10V	0-9.8V	5-30 Min	1-5 Hours	Low, Med, Max	1-250FC	1-250FC	1-60 Dec	1-60 Dec



LED Specifications **PRE-2-M Serenity Lens**

Premier-2-M Serenity Lens - LDL 3K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	2012	2041	1849	1758	1655	22
300	4L	4024	4081	3698	3516	3310	43
500	6L	6611	6704	6075	5776	5437	70
700	8L	9051	9179	8318	7909	7444	97

Premier-2-M Serenity Lens - LDL 4K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	2169	2200	1993	1895	1784	22
300	4L	4338	4399	3986	3790	3568	43
500	6L	7126	7227	6548	6227	5861	70
700	8L	9757	9895	8966	8525	8025	97

Premier-2-M Serenity Lens - LDL 5K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	2057	2086	1891	1798	1692	22
300	4L	4115	4173	3781	3595	3384	43
500	6L	6759	6855	6211	5906	5559	70
700	8L	9255	9385	8505	8087	7612	97

Premier-2-M Serenity Lens - LDL 3K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	91	93	84	80	75	22
300	4L	94	95	86	82	77	43
500	6L	95	96	87	83	78	70
700	8L	93	95	86	82	77	97

Premier-2-M Serenity Lens - LDL 4K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	99	100	91	86	81	22
300	4L	101	102	93	88	83	43
500	6L	102	104	94	89	84	70
700	8L	101	102	93	88	83	97

Premier-2-M Serenity Lens - LDL 5K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	94	95	86	82	77	22
300	4L	96	97	88	84	79	43
500	6L	97	98	89	85	80	70
700	8L	96	97	88	83	79	97

Premier-2-M Serenity Lens - LDL 3K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	2	0	1	1	0	1	1	0	1	1	0	1	1	0	1	43
500	6L	2	0	2	2	0	2	2	0	1	2	0	1	2	0	1	70
700	8L	3	0	3	2	0	2	2	0	2	2	0	2	2	0	1	97

Premier-2-M Serenity Lens - LDL 4K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	2	0	1	1	0	1	1	0	1	1	0	1	1	0	1	43
500	6L	2	0	2	2	0	2	2	0	2	2	0	2	2	0	1	70
700	8L	3	0	3	2	0	2	2	0	2	2	0	2	3	0	1	97

Premier-2-M Serenity Lens - LDL 5K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	2	0	1	1	0	1	1	0	1	1	0	1	1	0	1	43
500	6L	2	0	2	2	0	2	2	0	2	2	0	1	2	0	1	70
700	8L	3	0	3	2	0	2	2	0	2	2	0	2	3	0	1	97

Premier-2-M Serenity Lens - HDL 3K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	1805	1848	1676	1678	1779	22
300	4L	3611	3696	3352	3356	3558	43
500	6L	5932	6072	5506	5514	5845	70
700	8L	8122	8313	7539	7549	8003	97

Premier-2-M Serenity Lens - HDL 4K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	1946	1992	1806	1809	1918	22
300	4L	3892	3984	3613	3618	3835	43
500	6L	6394	6545	5935	5943	6301	70
700	8L	8755	8961	8126	8138	8627	97

Premier-2-M Serenity Lens - HDL 5K Lumen Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	1846	1890	1714	1716	1819	22
300	4L	3692	3779	3427	3432	3638	43
500	6L	6065	6208	5630	5638	5976	70
700	8L	8304	8500	7708	7719	8183	97

Premier-2-M Serenity Lens - HDL 3K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	82	84	76	76	81	22
300	4L	84	86	78	78	83	43
500	6L	85	87	79	79	84	70
700	8L	84	86	78	78	83	97

Premier-2-M Serenity Lens - HDL 4K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	88	91	82	82	87	22
300	4L	91	93	84	84	89	43
500	6L	92	94	85	85	91	70
700	8L	90	92	84	84	89	97

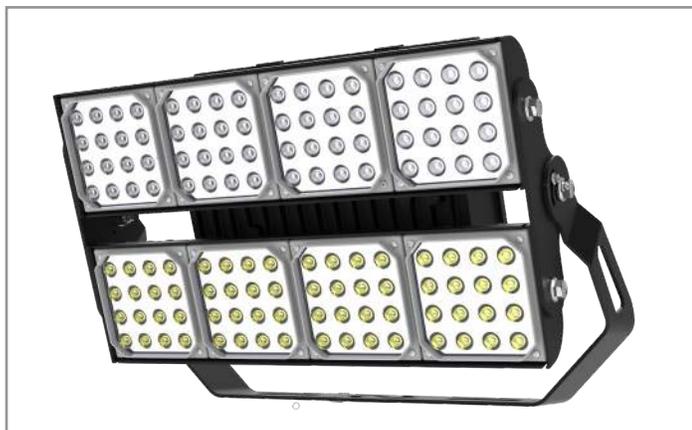
Premier-2-M Serenity Lens - HDL 5K Lumen Per Watt Data							
Current	Lumens	T1	T2	T3L	T4L	T5LS	Watts
150	2L	84	86	78	78	83	22
300	4L	86	88	80	80	85	43
500	6L	87	89	81	81	86	70
700	8L	86	88	80	80	84	97

Premier-2-M Serenity Lens - HDL 3K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	43
500	6L	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	70
700	8L	2	0	1	2	0	2	2	0	2	2	0	2	2	0	1	97

Premier-2-M Serenity Lens - HDL 4K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	2	0	1	1	0	1	1	0	1	1	0	1	2	0	1	43
500	6L	2	0	1	2	0	2	2	0	1	2	0	1	2	0	1	70
700	8L	3	0	1	3	0	2	2	0	2	2	0	2	2	0	1	97

Premier-2-M Serenity Lens - HDL 5K BUG Data																	
Current	Lumens	T1			T2			T3L			T4L			T5LS			Watts
		B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
150	2L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	22
300	4L	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	43
500	6L	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	70
700	8L	3	0	1	2	0	2	2	0	2	2	0	2	2	0	1	97

Project		Catalog #		Type	
Prepared by		Notes		Date	



Ephesus

LUMAVISION

CCT Tunable or Fixed-Color White LED
Sports & Entertainment Luminaire

Typical Applications

- Aerial and Ground Sports Venues • Multi-Event Centers
- Gymnasiums & Field Houses • Outdoor Courts • Basketball Courts
- Tennis Courts • Pickleball Courts • Volleyball Courts • Playgrounds & Skateparks
- Parks and Recreation Venues • Ice Hockey & Skating Arenas

Interactive Menu

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- Performance Data [page 3](#)
- Ordering Information Accessories [page 6](#)
- Accessory Details [page 6](#)
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- Sample System Topology [page 25](#)

Product Certification



POOL POLE LIGHTING WITH
30-50FT POLE HEIGHT; QTY. OF
HEAD TBD PER PHOTOMETRIC
CALCS.

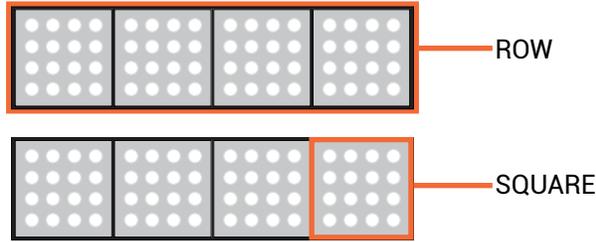
Top Product Features

- **Optical Performance**
 - **AccuLED Optics™:** LumaVision utilizes patented and industry leading UV coated AccuLED Optics™ preventing yellowing and degradation over time.
 - **Glare and Spill Light Control:** Twenty (20) available beam distributions provide the flexibility and performance required for indoor and outdoor sports lighting.
 - **CCT Pro Tuning Option:** Allows for a tunable color temperature range of 3000K-6500K.
 - **Dark Sky Compliance Capable:** Light your game for the players and the community
- **Reliability**
 - **Built To Perform:** Thermally managed driver and LED housing provides demonstrated reliability confidence.
 - **L90:** With a 90,000+ hour rated life (at greater than 90% lumen maintenance), the LumaVision LED luminaire is designed for long life.
- **Take Control of Your System**
 - Compatible with the Ephesus control ecosystem, putting the control of your system in the palm of your hand.
- **Ease of Installation**
 - 6 flexible indoor/outdoor mounting options
- **Customizable**
 - 7 factory custom color options.
- **Accessories**
 - Custom visors provide additional cutoff and spill light control. Sport specific impact resistance technologies reduce maintenance on the system.

Installation
Manual

Product Model Terminology

Model Name	Description
LumaVision 3	1 Row, 3 Squares
LumaVision 4	1 Row, 4 Squares
LumaVision 6	2 Rows, 6 Squares
LumaVision 7	2 Rows, 7 Squares
LumaVision 8	2 Rows, 8 Squares



Order Information -

NOTE: A complete fixture order requires a selection entry for **Brand, Family, Model, Drive Current, Voltage, Color, Trim Option, Mount, CRI/CCT, Optic, Control, AC Whip, Surge Options, Construction Options.**

SAMPLE ORDER NUMBER: EPH-VN-08-D-HV-AP-WHT-YOKE-930-11-010-A07-10MSP-ST

Brand	Family	Model	Drive Current	Voltage	Color	Trim Option
Brand EPH = Ephesus, Standard TAA=Trade Agreements Act ¹	Family VN = LumaVision	Model ² 03 = 3 Light Squares ³ 04 = 4 Light Squares ³ 06 = 6 Light Squares ⁴ 07 = 7 Light Squares ⁴ 08 = 8 Light Squares ⁴	Drive Current D = 1200 mA ⁵ E = 1500 mA	Voltage HV = High Voltage LV = Low Voltage	Color AP = Grey (Standard) BK = Black BZ = Bronze WH = White GR = Green GM = Graphite Metallic DP = Dark Platinum	Trim Option WHT = White (Standard) LCF = Trim painted to match color ⁶
Notes: (1) Only product configurations with this designated prefix are built to be compliant with the Trade Agreements Act of 1979 (TAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes:	Notes: (2) PRO = CCT Tuning 3000-6500K option only available in 04, 06, and 08 Models (3) Single Bar Configuration (4) Double Bar Configuration	Notes: (5) Available as a reduced drive current option for models with HA or HSS. D option also available for higher efficacy 8 square model.	Notes: HV = 347-480 VAC LV = 120-277 VAC	Notes:	Notes: (6) LCF Not available with optical types 33, 44, 55, 66, 77 and LAM

Mount	CRI/CCT	Optic	Control	AC Whip	Surge Options	Construction Options
Mount YOKE = Yoke (Standard) ⁷ PNDT = Pendant AAJL = Adjustable arm direct pole mount ^{7, 9} AAJC = Adjustable arm direct pole (cord through housing) ⁷ ADJL = Slipfitter (Leads through slipfitter) ^{7, 8, 9} ADJC = Slipfitter (Cord through housing) ^{7, 8}	CRI/CCT 730 = 70CRI, 3000K 735 = 70CRI, 3500K 740 = 70CRI, 4000K 750 = 70CRI, 5000K 760 = 70CRI, 5700K 930 = 90CRI, 3000K 935 = 90CRI, 3500K 940 = 90CRI, 4000K 950 = 90CRI, 5000K PRO = CCT Tuning 3000-6500K ¹⁰	Optic 33 = NEMA 3H x 3V ¹¹ 44 = NEMA 4H x 4V ¹¹ 55 = NEMA 5H x 5V ¹¹ 66 = NEMA 6H x 6V ¹¹ 77 = NEMA 7H x 7V LAM = Lambertian Distribution T1 = Type I T2 = Type II T2R = Type II Roadway T3 = Type III T3R = Type III Roadway T4FT = Type IV Forward Throw T4W = Type IV Wide 5NQ = Type V Narrow 5MQ = Type V Square Medium 5WQ = Type V Square Wide SL2 = Type II w/Spill Control SL3 = Type III w/Spill Control SL4 = Type IV w/Spill Control RW = Rectangular Wide Type I	Control 010 = 0-10V (Standard) AMS = AirMesh ¹¹ DAL = DALI LBI = DMX, Indoor ¹² LBO = DMX, Outdoor ¹²	AC Whip ¹³ NC = No Cord A05 = 5ft whip A07 = 7ft whip (Standard) A10 = 10ft whip A15 = 15ft whip	Surge Options ¹⁴ 10MSP = Parallel 10kV MOV Surge Protective Device (Standard) 20MSP = Parallel 20kV MOV Surge Protective Device	Construction Options ST = Standard HA = 50°C High Ambient ¹⁶ CC = Coastal Construction finish HSS = House Side Shield ^{15, 16}
Notes: (7) 3G Vibration Rated Per ANSI C136.31-2010 (8) Slipfitter mount to fasten luminaire to a 3 inch outer diameter tenon size. (9) Must use NC-No Cord for AC whip option	Notes: (10) Available for 4 Square, 6 Square and 8 Square models. Requires an AMS, LBI or LBO control option. Only compatible with optics 33, 44, 55, 66, 77 or LAM.	Notes: (11) For downlight applications only, if uplight is required contact Ephesus for more details.	Notes: 010 = 5C/16 BLK Cord AMS = 3C/16 BLK Cord DAL = 5C/16 BLK Cord (11) For downlight applications only, if uplight is required contact Ephesus for more details. (12) DMX indoor is two XLR cables, DMX outdoor is a single 5-conductor cable for watertight connection. Not compatible with AAJC, ADJL or ADJC mounts. For more details on DMX system response rates please refer to the product installation manual.	Notes: (13) AC Whip connecting the Driver Box to the electrical power source. NC=No Cord required for ADJL and AAJL mounting types. All other options require a cord length selection.	Notes: (14) Contact ephesus for additional protection options.	Notes: (15) Not available with optical types 33, 44, 55, 66, 77, LAM, T1, 5NQ, 5MQ, 5WQ & RW (16) Can not be used with drive current type E = 1500mA

DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details

Performance Data¹

	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
Nominal Lumen Output (at 70 CRI) ²	28000	36000	55000	60000	73000
Nominal Lumen Output (at 90 CRI) ³	20200	26200	39700	42300	52000
Nominal Power ⁴	232	304	464	532	627
Voltage Range (Low)	120-277VAC				
Voltage Range (High)	347 - 480VAC				
Efficacy (lm/W)	121	119	119	111	116
CRI ⁵	70, 90 CRI				
TLCI (at 90 CRI) ⁵	92				
CCT Range (at 70 CRI)	3000-5700K				
CCT Range (at 90 CRI)	3000-5000K				
CCT Tunable Range (PRO Option)	3000-6500K				
Distribution (NEMA)	Refer to Order Information on page 3 for optic options				
Dimming Range	10%-100%				
Operating Temperature Range	-40°C to +40°C				
Usage	INDOOR, OUTDOOR				
Electrical Certifications	FCC Part 15, UL8750, UL1598, DLC STANDARD				
Environmental Certifications	IP66; ANSI C136.31-2010, RoHS				
Impact Certifications ⁶	IK10 Rated				
Surge	10kV (standard), 20kV (option)				

Luminaire Approximate Weight ⁷	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
With Yoke Weight (LBS)	24.25	26.44	45.93	50.58	50.58
With Pendant (LBS)	24.48	26.28	42.16	45.31	45.31
With Slipfitter (LBS)	27.8	29.98	45.53	46.49	46.49

Mount Vibration Rating Per ANSI C136.31-2010

YOKE = Yoke (Standard)	3G				
PNDT = Pendant	N/A				
AAJL = Adjustable arm direct pole mount	3G				
AAJC = Adjustable arm direct pole (cord through housing)	3G				
ADJL = Slipfitter (Leads through slipfitter)	3G				
ADJC= Slipfitter (Cord through housing)	3G				

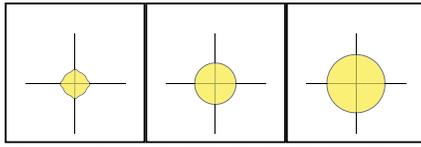
Effective Projected Area (EPA) ^{8, 9}	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
YOKE = Yoke (Standard)	1.61 (sq. ft.)	1.64 (sq. ft.)	2.38 (sq. ft.)	2.78 (sq. ft.)	2.78 (sq. ft.)
PNDT = Pendant	1.6 (sq. ft.)	1.89 (sq. ft.)	2.34 (sq. ft.)	2.9 (sq. ft.)	2.9 (sq. ft.)
AAJL = Adjustable arm direct pole mount	1.8 (sq. ft.)				
AAJC = Adjustable arm direct pole (cord through housing)	1.8 (sq. ft.)				
ADJL = Slipfitter (Leads through slipfitter)	1.77 (sq. ft.)	2.04 (sq. ft.)	2.47 (sq. ft.)	2.99 (sq. ft.)	2.99 (sq. ft.)
ADJC= Slipfitter (Cord through housing)	1.77 (sq. ft.)	2.04 (sq. ft.)	2.47 (sq. ft.)	2.99 (sq. ft.)	2.99 (sq. ft.)

NOTES:

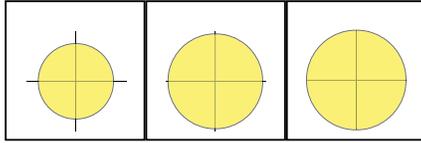
- (1) Specifications are subject to change without notice
- (2) Based on T4FT lens, 70 CRI, 5000K
- (3) Based on 66 lens, 70 CRI, 5000K
- (4) Values are +/- 5% when fixture is operated at 25°C ambient
- (5) Values are +/- 3 points
- (6) IK10 Rating applies to LumaVision configurations using the Vandal Shield accessory. (VSH3, VSH4, VSH6, VSH7, VSH8)
- (7) Weight varies depending on mounting bracket, lighthead and driverbox selection
- (8) Calculated with luminaire aimed 45° to the ground
- (9) EPA varies depending on the aiming angle of the fixture

LUMAVISION AccuLED Optics™

Symmetrical

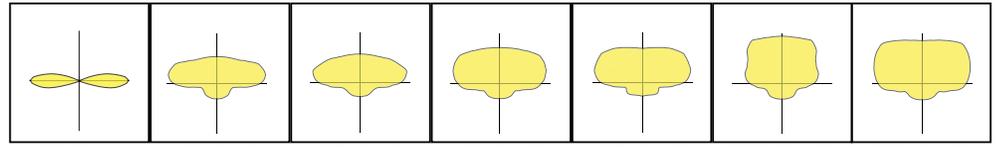


33 = NEMA 3H x 3V 44 = NEMA 4H x 4V 55 = NEMA 5H x 5V

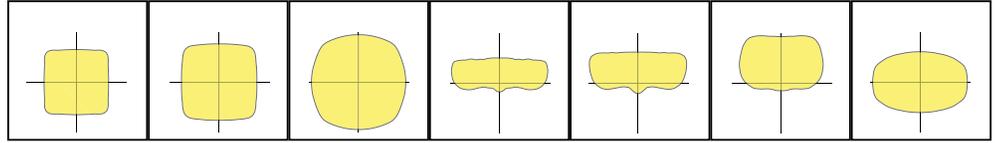


66 = NEMA 6H x 6V 77 = NEMA 7H x 7V LAM = Lambertian Distribution

Asymmetrical

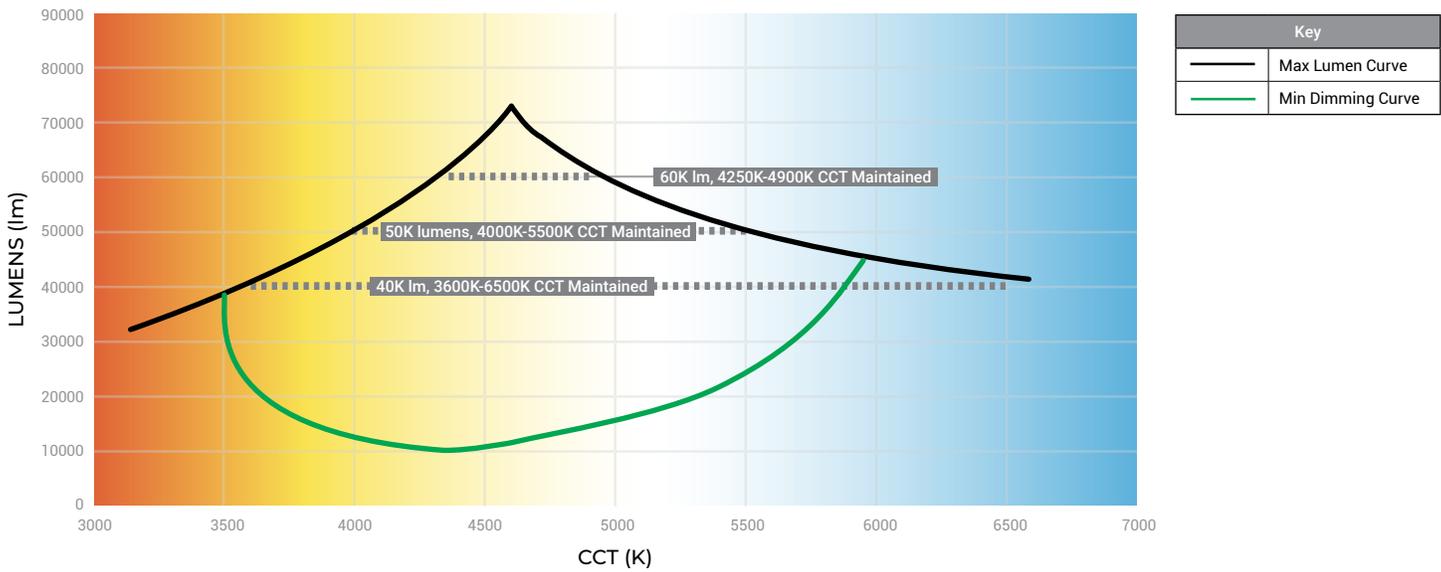


T1 = Type I T2 = Type II T2R = Type II Roadway T3 = Type III T3R = Type III Roadway T4FT = Type IV Forward Throw T4W = Type IV Wide

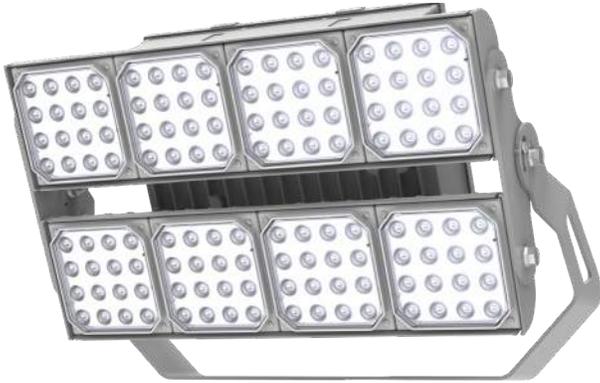


5NQ = Type V Narrow 5MQ = Type V Square Medium 5WQ = Type V Square Wide SL2 = Type II w/Spill Control SL3 = Type III w/Spill Control SL4 = Type IV w/Spill Control RW = Rectangular Wide Type I

LUMAVISION CCT PRO TUNING OPERATING RANGE



Color Options



AP = GREY (STANDARD)



- Customizeable color options (7 options)
- Factory custom built accessories

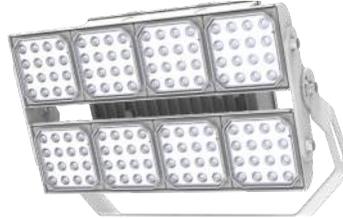
Note: colors may appear differently based on viewing device.



BK = BLACK



BZ = BRONZE



WH = WHITE



GR = GREEN



GM = GRAPHITE METALLIC



DP = DARK PLATINUM

Ordering Information for External Accessories

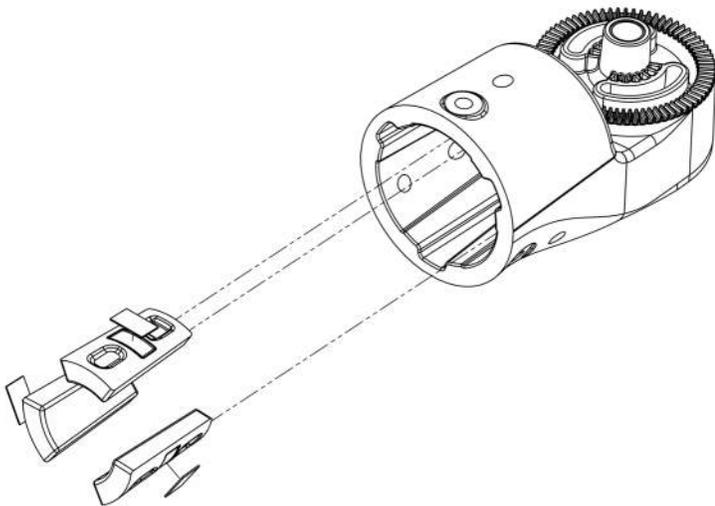
NOTE: A complete accessory order requires a selection entry for **Brand, Family, Accessory, Visor Color (If applicable)**.

SAMPLE ORDER NUMBER: **EPH-VN-VIS3-AP**

Brand	Family	Accessory	Visor Color	
Brand	Family	Accessory ¹	Visor Color	Intended Use
EPH = Ephesus	VN = LumaVision	VIS3 = Visor for Model 03 = 3 Light Squares VIS4 = Visor for Model 04 = 4 Light Squares VIS6 = Visor for Model 06 = 6 Light Squares VIS7 = Visor for Model 07 = 7 Light Squares VIS8 = Visor for Model 08 = 8 Light Squares	AP = Grey (Standard) BK = Black BZ = Bronze WH = White GR = Green GM = Graphite Metallic DP = Dark Platinum	For additional cutoff and spill light control.
		VSH3 = Vandal Shield for Model 03 = 3 Light Squares VSH4 = Vandal Shield for Model 04 = 4 Light Squares VSH6 = Vandal Shield for Model 06 = 6 Light Squares VSH7 = Vandal Shield for Model 07 = 7 Light Squares VSH8 = Vandal Shield for Model 08 = 8 Light Squares		IK10 rated polycarbonate shield improves impact resistance to small projectiles (ie. rocks, or pellets).
		WRG3 = Wire Guard for Model 03 = 3 Light Squares WRG4 = Wire Guard for Model 04 = 4 Light Squares WRG6 = Wire Guard for Model 06 = 6 Light Squares WRG7 = Wire Guard for Model 07 = 7 Light Squares WRG8 = Wire Guard for Model 08 = 8 Light Squares		Stainless steel cage improves impact resistance to large projectiles (ie. basketball, pucks).
		SRA238 = Slipfitter Spacer		Used with the ADJC & ADJL Slipfitter mount to fasten luminaire to a 2 3/8in outer diameter tenon size.
		HWCB = Center Bolt Mount Fastening Hardware		Center Bolt Mount with a 3/4 - 10 x 1.75in bolt in the center of pendant mount. Fastening hardware used to replace common Arena Mounting style "CS" for catwalk brackets and other center stud mount applications.
		HWMM = Multi-Point Mount Fastening Hardware		Multi-Point Mounting with 2 qty. 5/16-18 x 1.25in bolts on either edge of the pendant yoke. Can be paired with "HWCB" or "HWCN" as necessary.
		HWCN = Conduit Nuts Fastening Hardware		Two Conduit Nuts to attach a standard 3/4in threaded conduit to the center of the pendant mount yoke. Equivalent to the Arena "MM" multi-mount style mount when paired with "HWMM".
Notes:				

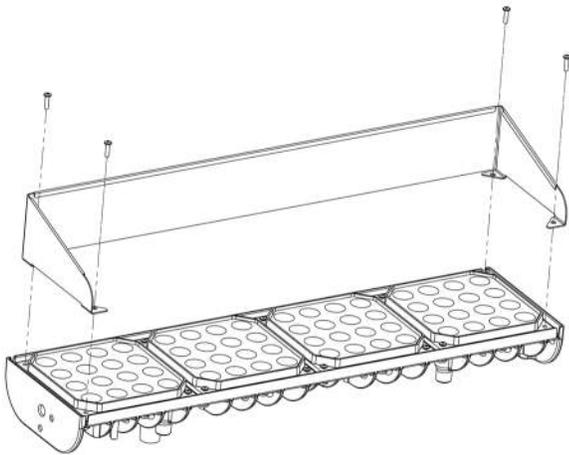
Specifications and dimensions subject to change without notice. Consult your lighting representative at Ephesus Sports Lighting or visit www.EphesusLighting.com for available options, accessories and ordering information.

Mounting Accessory Part Details:



Slipfitter Spacer (SRA238)

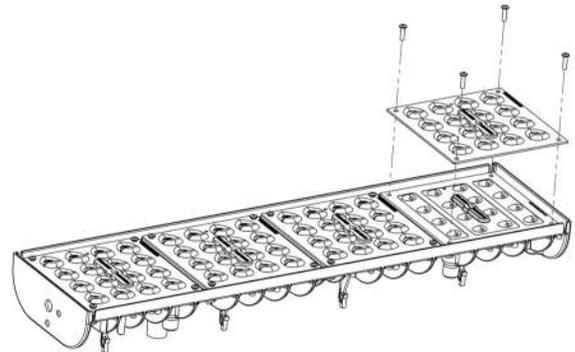
External Optical Cut-off Accessory Part Details:



Visor Full Bar (VIS) Parts¹

ITEM NO.	DESCRIPTION	WEIGHT (LBS)
VIS3	Visor for Model 03 = 3 Light Squares	1.19
VIS4	Visor for Model 04 = 4 Light Squares	1.46
VIS6	Visor for Model 06 = 6 Light Squares	2.38
VIS7	Visor for Model 07 = 7 Light Squares	2.65
VIS8	Visor for Model 08 = 8 Light Squares	2.92

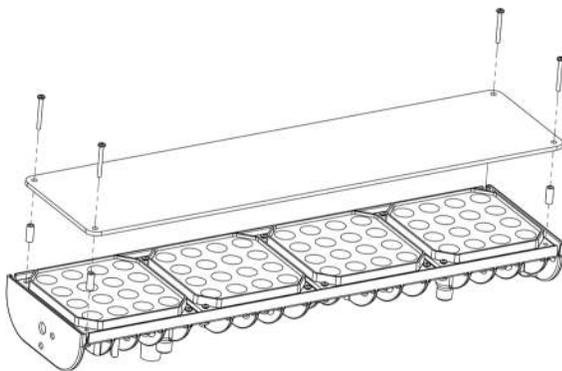
¹image shown in EPH-VN-VIS4-XX configuration. See page 5 for color options.



House Side Shield (HSS)

Factory Installation only

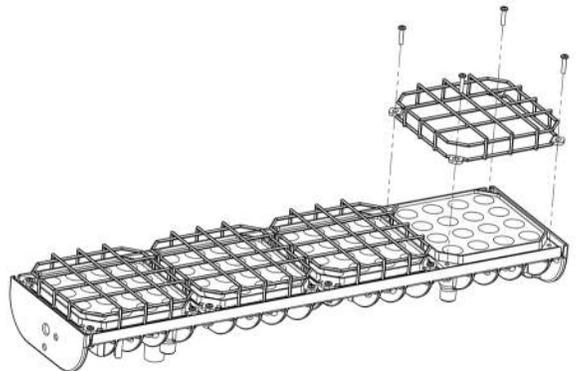
External Impact Shield and Guard Accessory Part Details:



Vandal Shield (VSH) Parts¹

ITEM NO.	DESCRIPTION	WEIGHT (LBS)
VSH3	Vandal Shield for Model 03 = 3 Light Squares	0.78
VSH4	Vandal Shield for Model 04 = 4 Light Squares	1.04
VSH6	Vandal Shield for Model 06 = 6 Light Squares	1.56
VSH7	Vandal Shield for Model 07 = 7 Light Squares	1.82
VSH8	Vandal Shield for Model 08 = 8 Light Squares	2.08

¹image shown in EPH-VN-VSH4 configuration

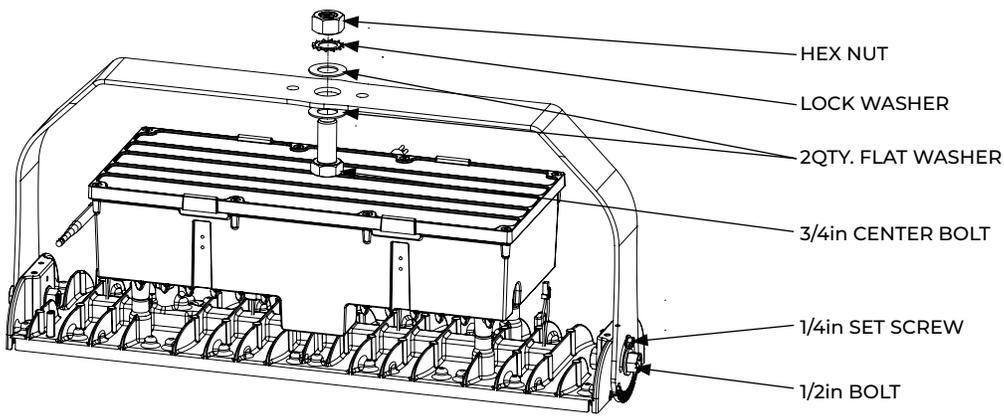


Wire Guard (WRG) Parts¹

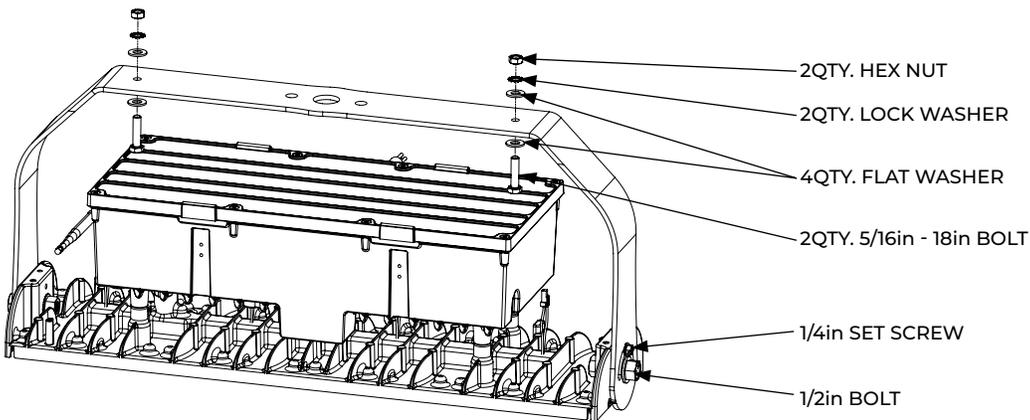
ITEM NO.	DESCRIPTION	WEIGHT (LBS)
WRG3	Wire Guard for Model 03 = 3 Light Squares	1.08
WRG4	Wire Guard for Model 04 = 4 Light Squares	1.44
WRG6	Wire Guard for Model 06 = 6 Light Squares	2.16
WRG7	Wire Guard for Model 07 = 7 Light Squares	2.52
WRG8	Wire Guard for Model 08 = 8 Light Squares	2.88

¹image shown in EPH-VN-WRG4 configuration

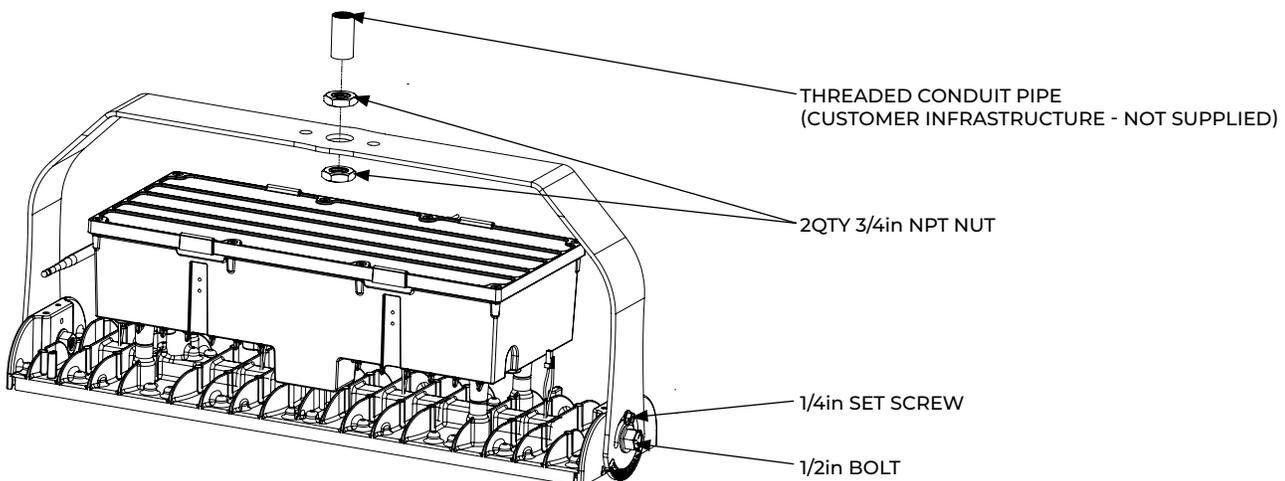
Fastening Hardware Accessory Part Details:



Center Bolt Mount Fastening Hardware (HWCB)



Multi-point Mount Fastening Hardware (HWMM)



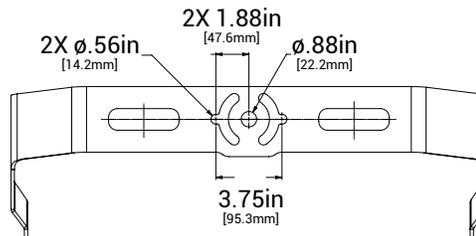
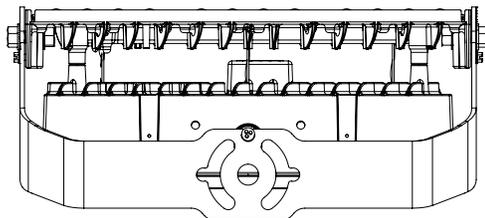
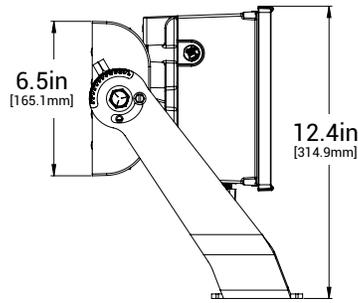
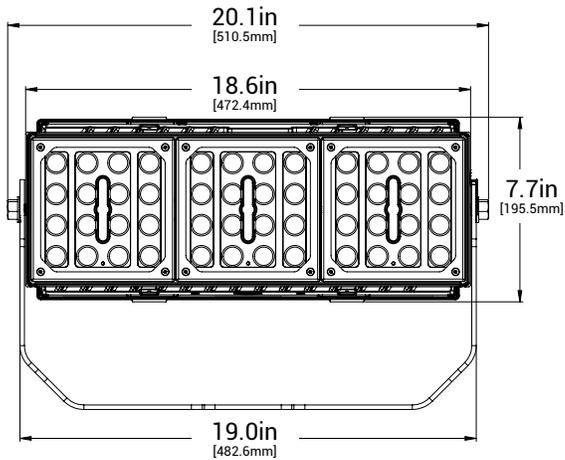
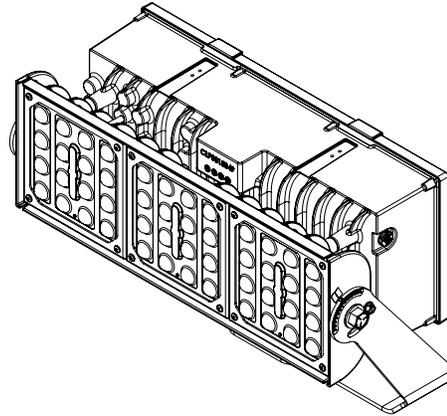
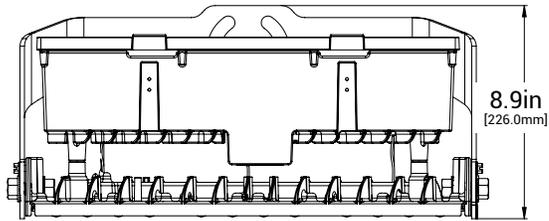
Conduit Nuts Fastening Hardware (HWCN)

Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 3

MOUNT TYPE: YOKE (YOKE MOUNT)

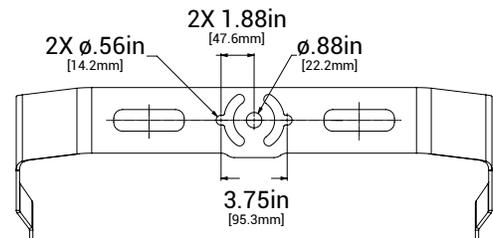
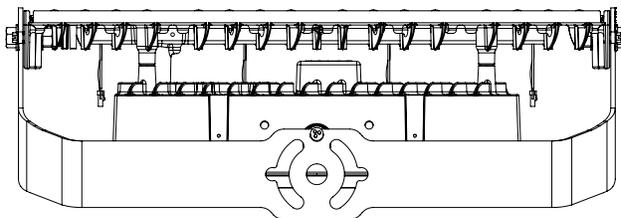
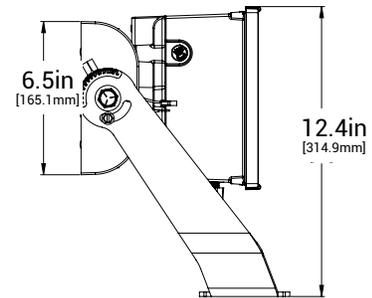
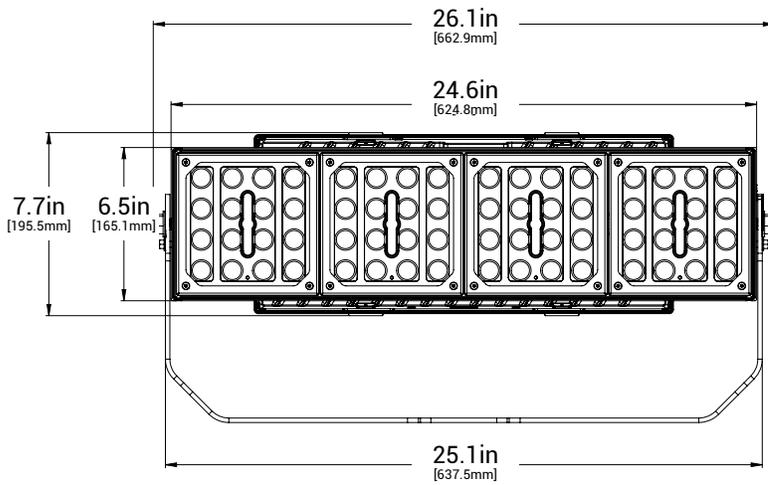
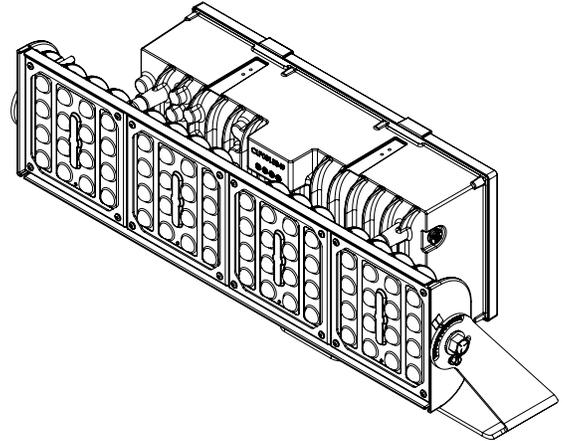
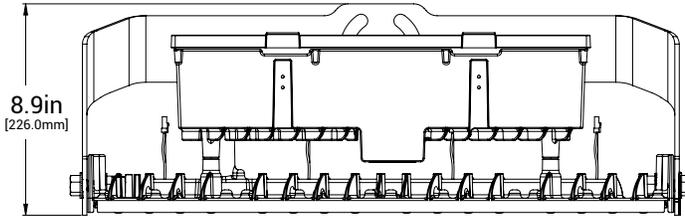


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 4

MOUNT TYPE: YOKE (YOKE MOUNT)

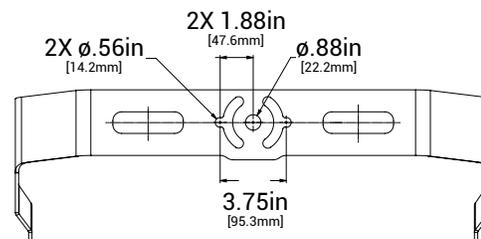
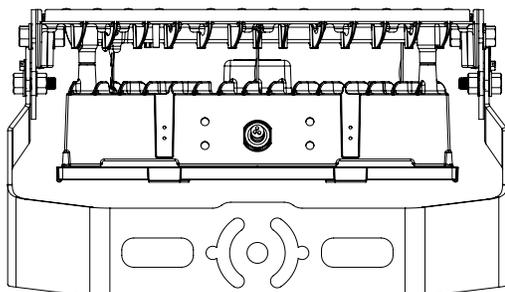
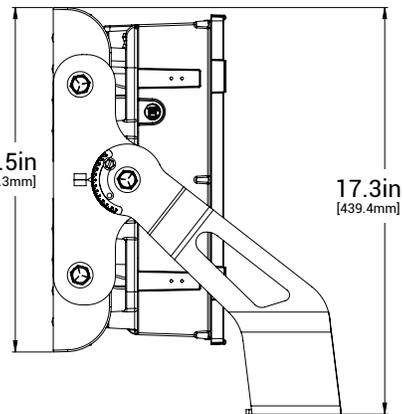
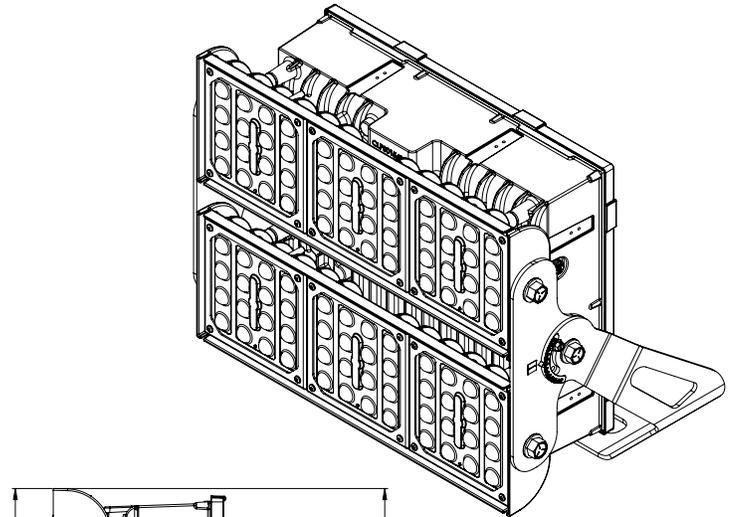
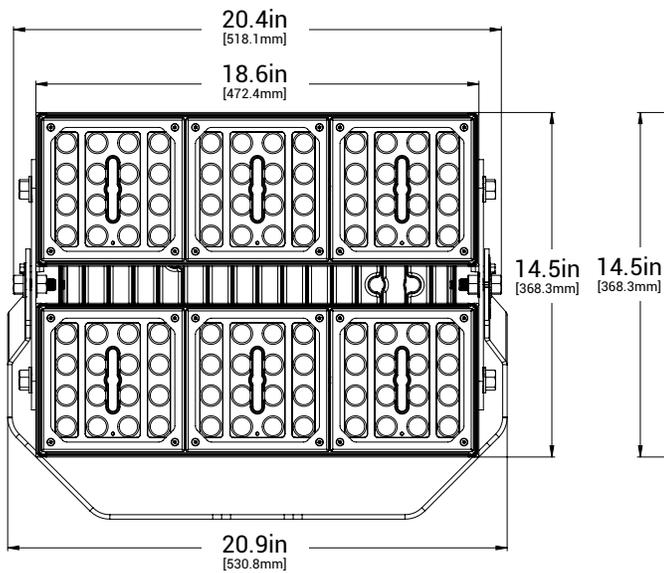
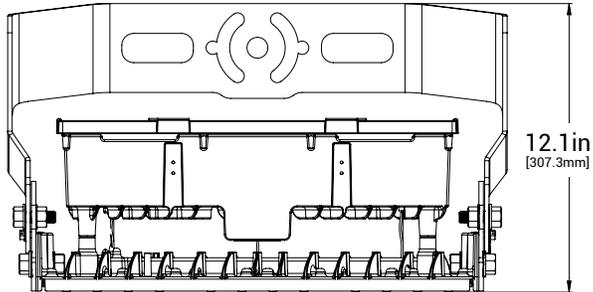


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 6

MOUNT TYPE: YOKE (YOKE MOUNT)

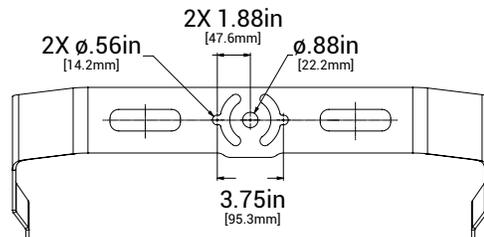
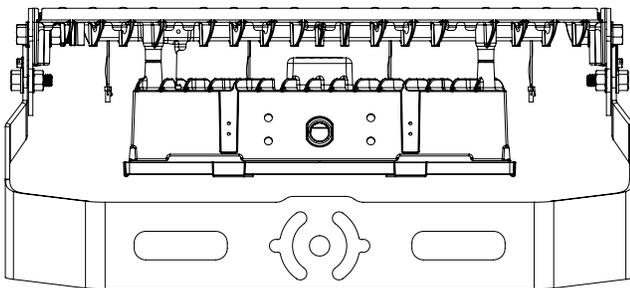
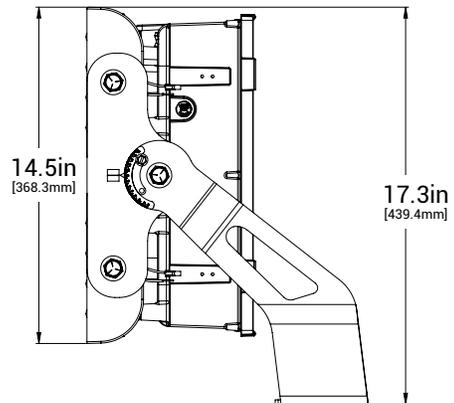
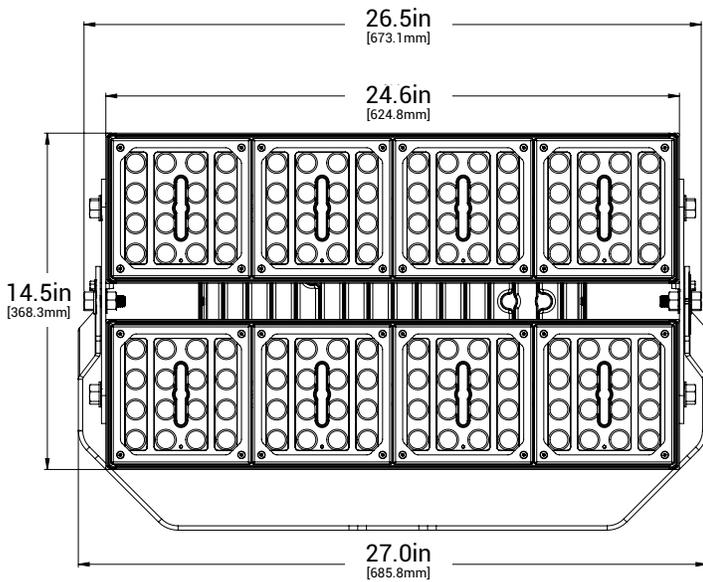
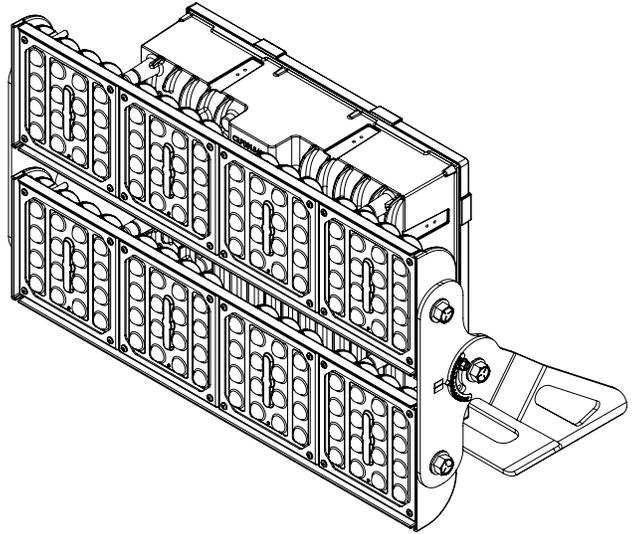
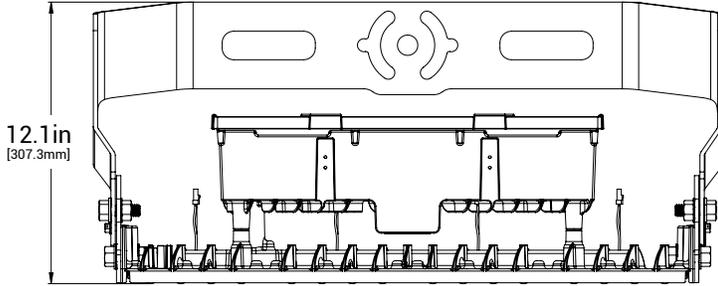


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 7 & 8

MOUNT TYPE: YOKE (YOKE MOUNT)

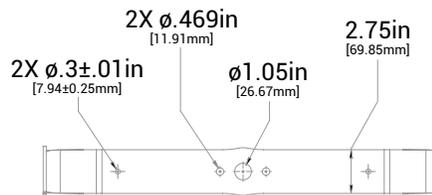
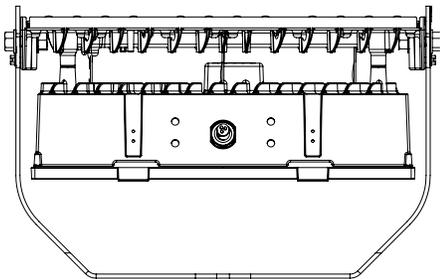
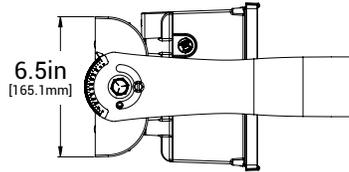
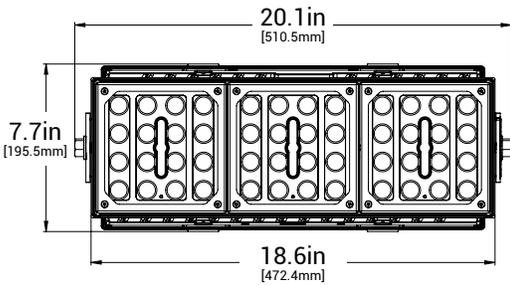
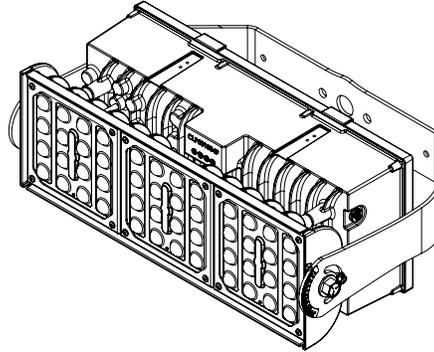
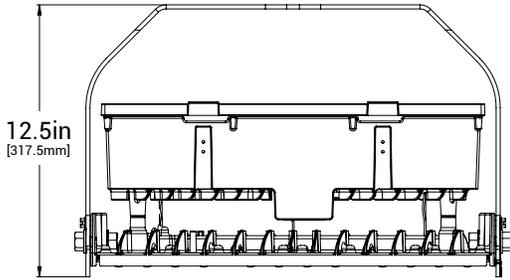


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 3

MOUNT TYPE: PNDT (PENDANT MOUNT)

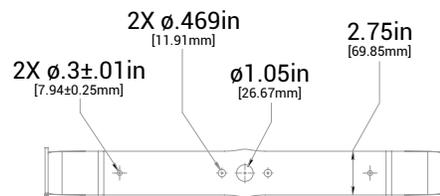
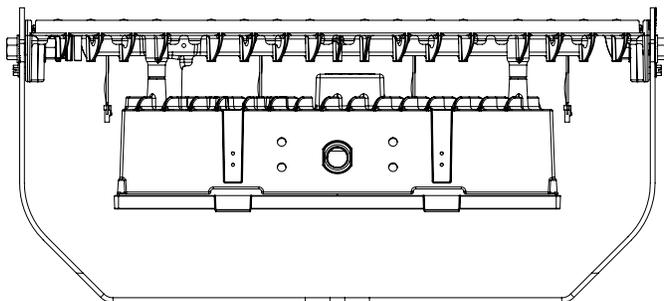
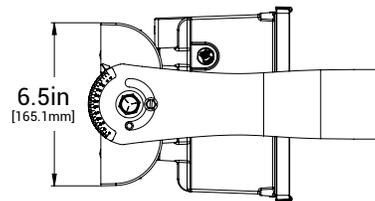
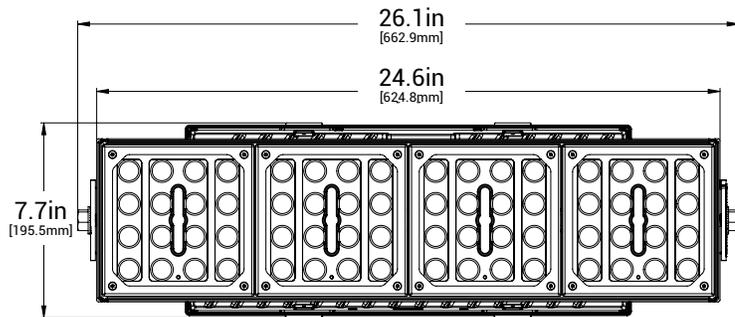
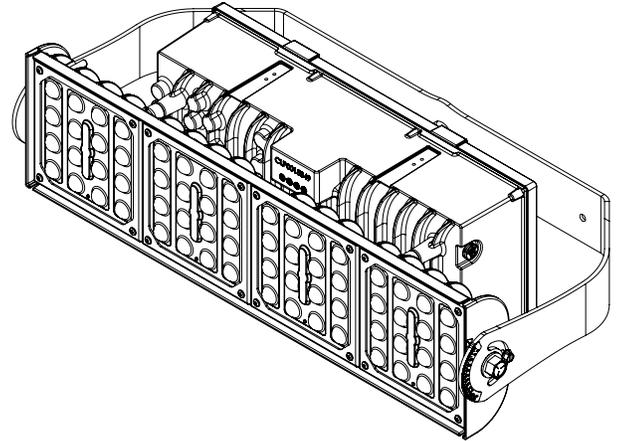
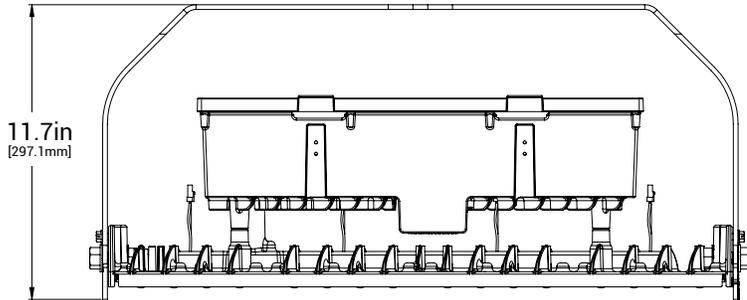


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 4

MOUNT TYPE: PNDT (PENDANT MOUNT)

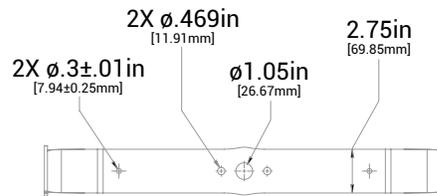
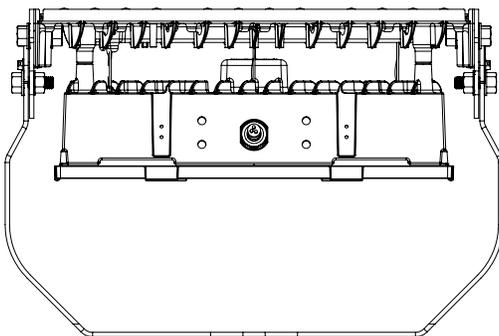
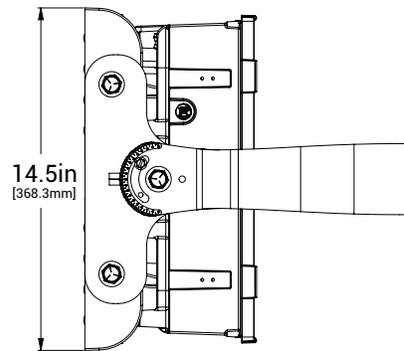
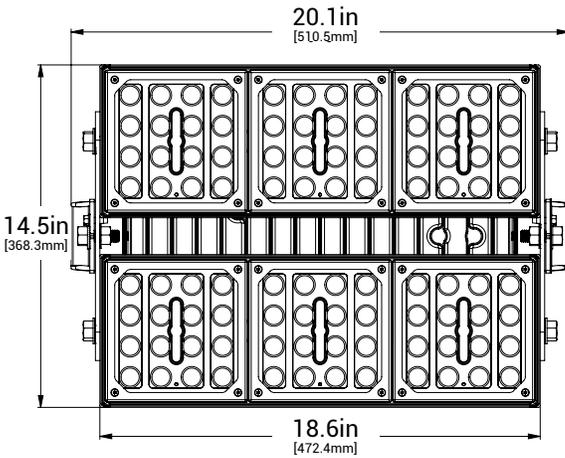
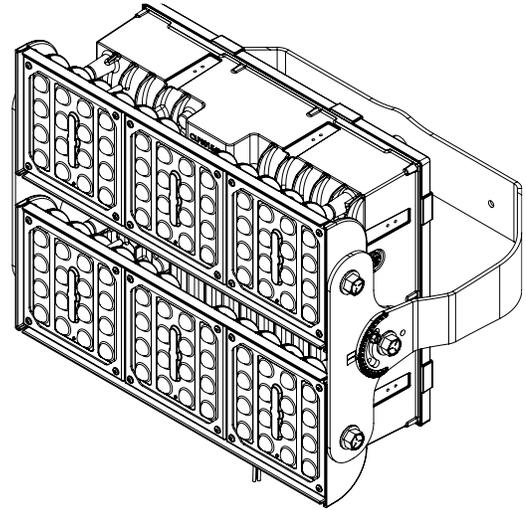
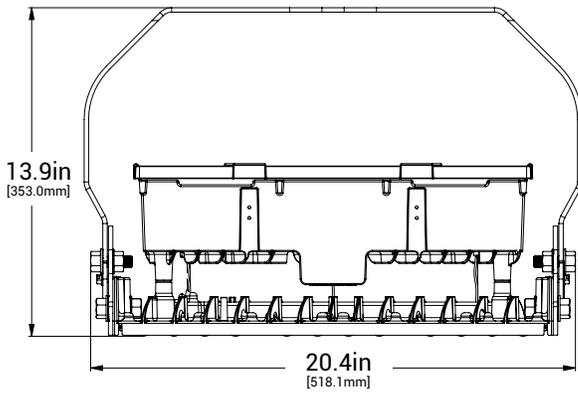


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 6

MOUNT TYPE: PNDT (PENDANT MOUNT)

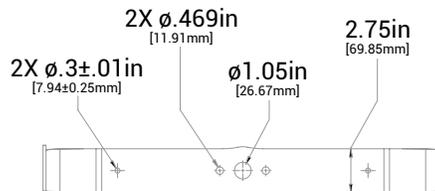
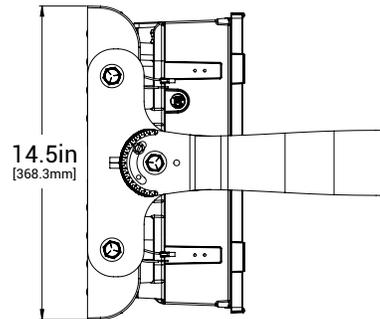
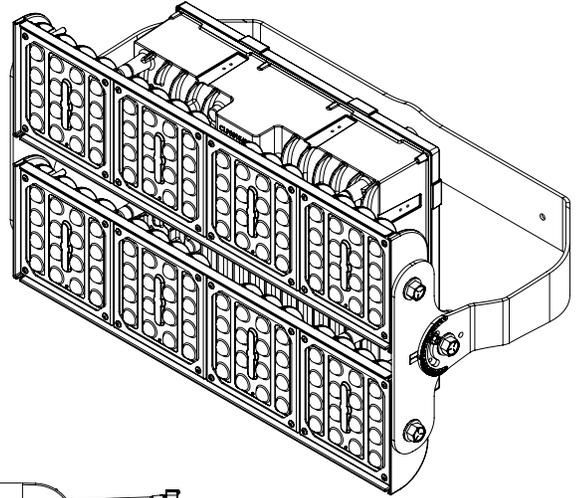
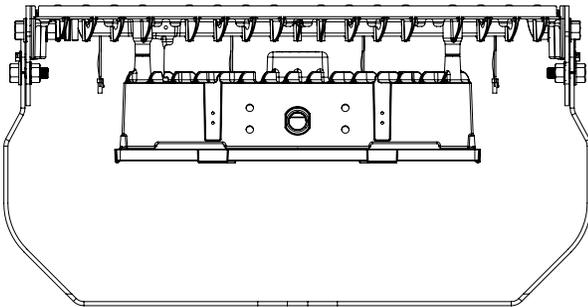
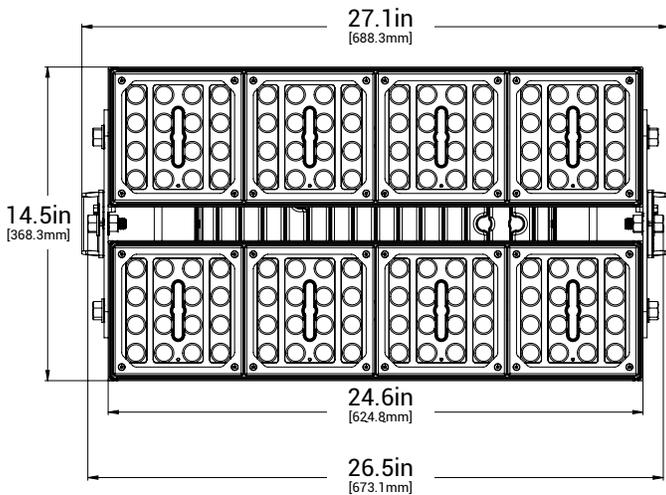
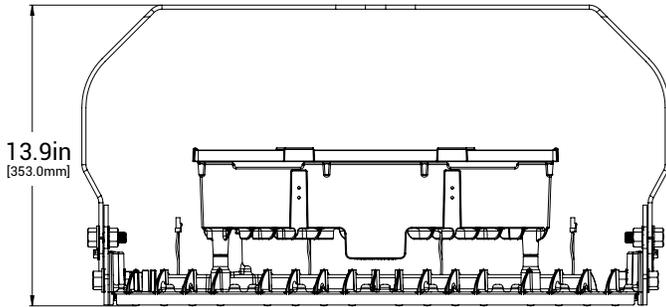


Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 7 & 8

MOUNT TYPE: PNDT (PENDANT MOUNT)



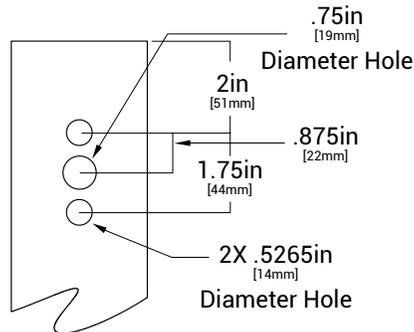
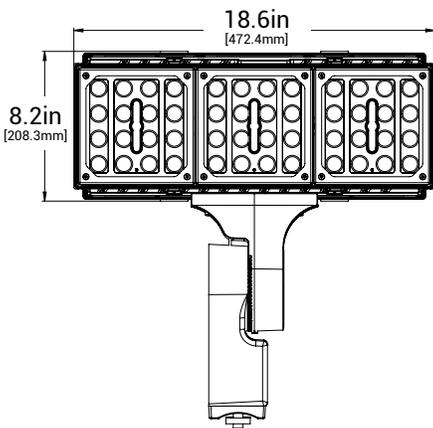
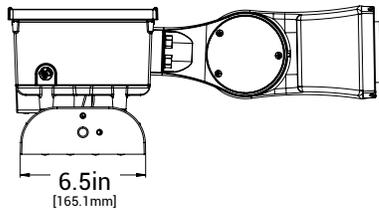
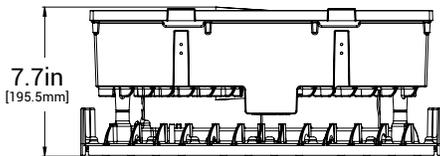
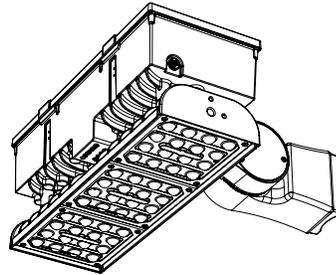
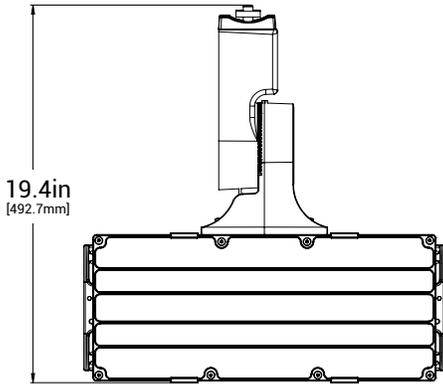
Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 3

MOUNT TYPE:

- AAJL (ADJUSTABLE ARM DIRECT POLE MOUNT)
- AAJC (ADJUSTABLE ARM DIRECT POLE MOUNT [CORD THROUGH HOUSING])



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to [Pole Drill Patterns Document](#) for additional support information.

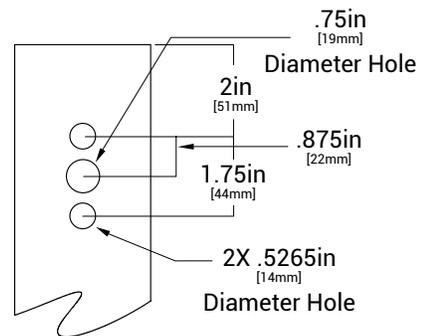
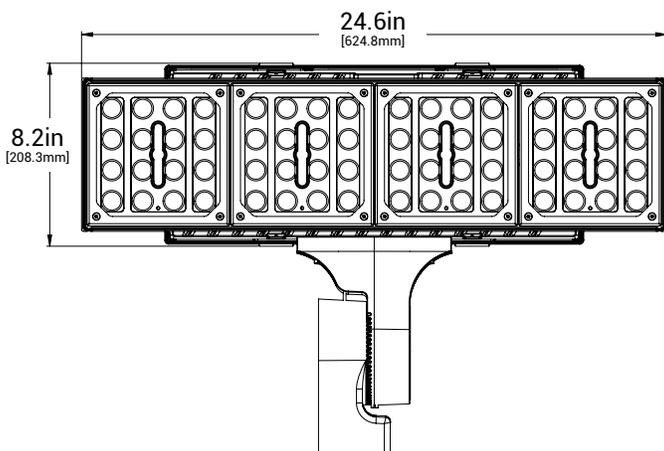
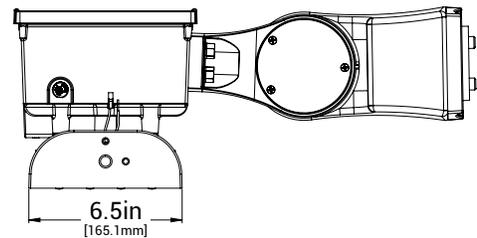
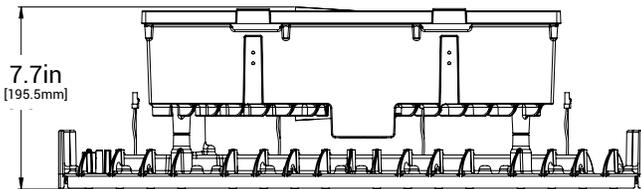
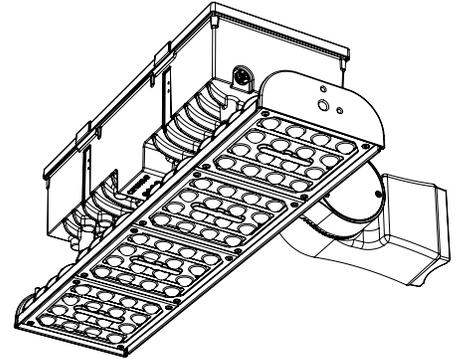
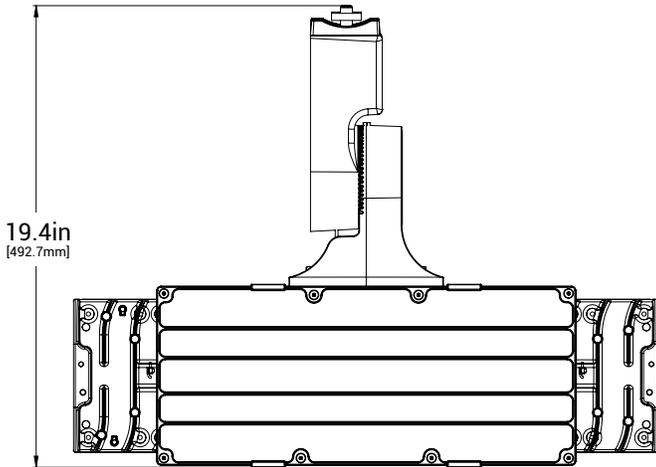
Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 4

MOUNT TYPE:

- AAJL (ADJUSTABLE ARM DIRECT POLE MOUNT)
- AAJC (ADJUSTABLE ARM DIRECT POLE MOUNT [CORD THROUGH HOUSING])



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to [Pole Drill Patterns Document](#) for additional support information.

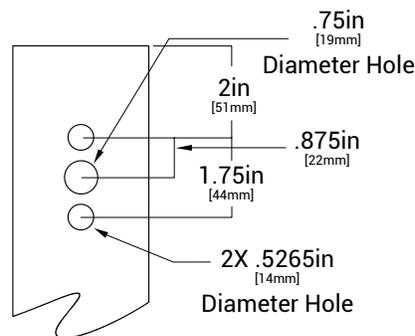
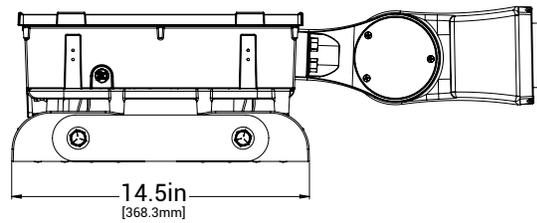
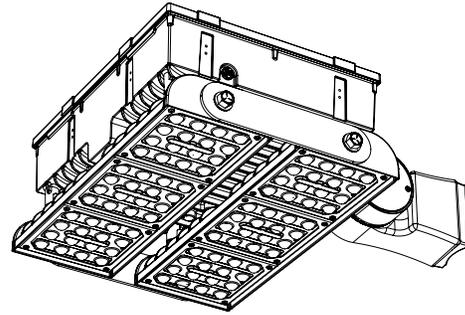
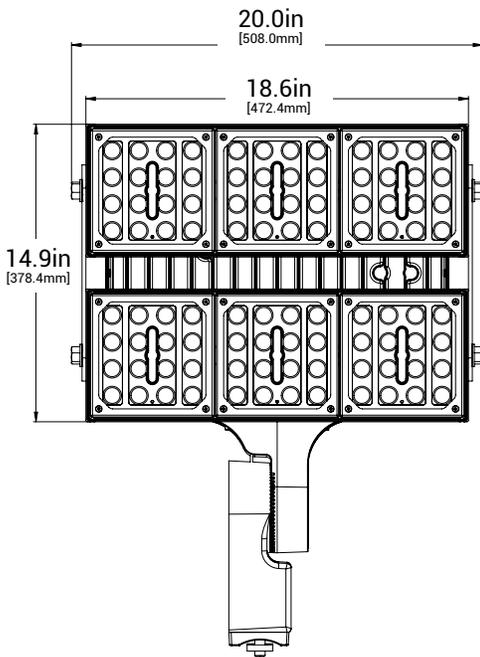
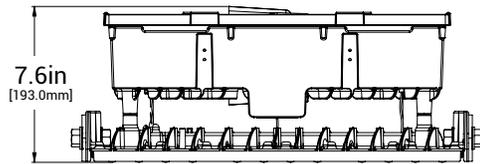
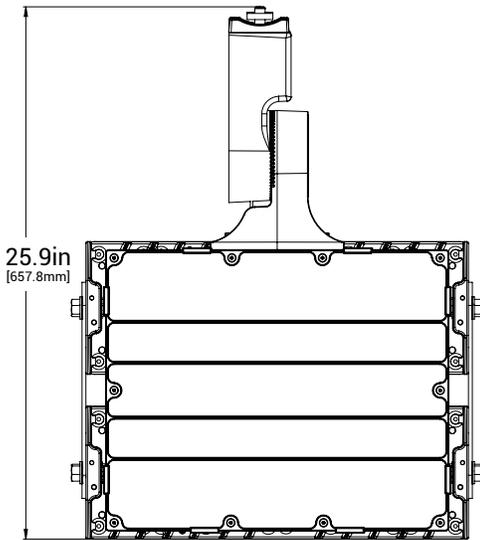
Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 6

MOUNT TYPE:

- AAJL (ADJUSTABLE ARM DIRECT POLE MOUNT)
- AAJC (ADJUSTABLE ARM DIRECT POLE MOUNT [CORD THROUGH HOUSING])



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to [Pole Drill Patterns Document](#) for additional support information.

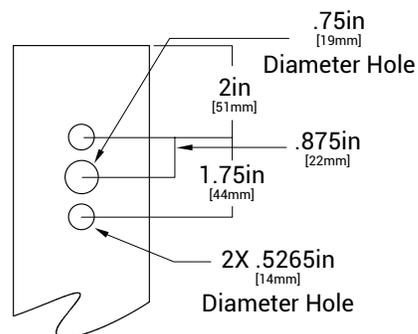
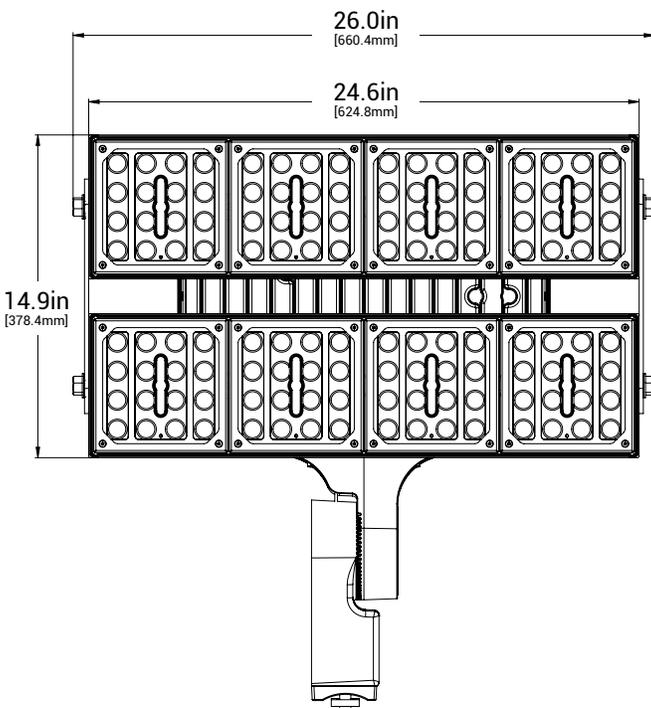
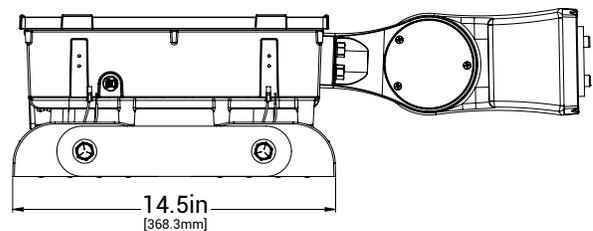
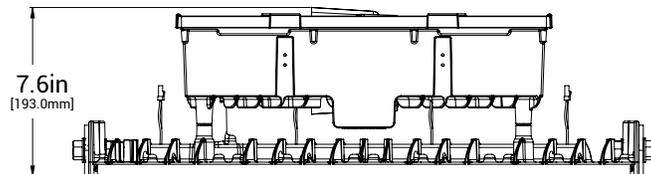
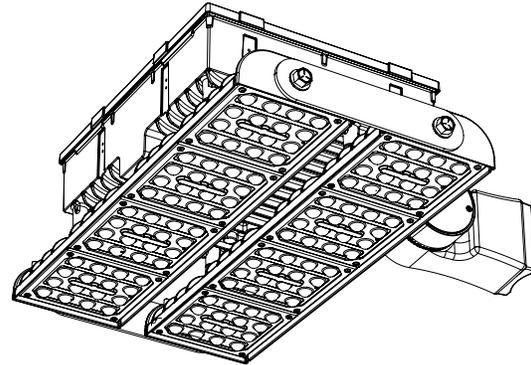
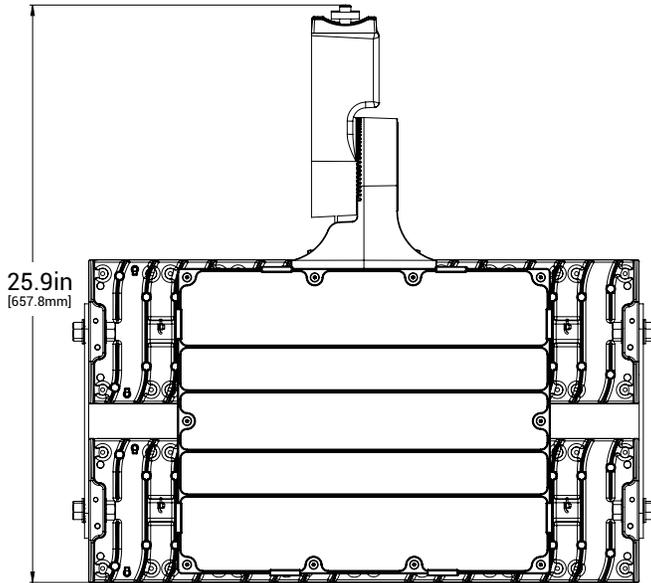
Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION

MODEL: 7 & 8

MOUNT TYPE:

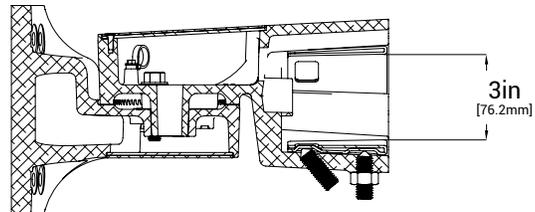
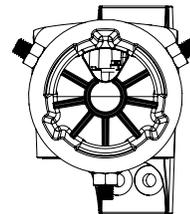
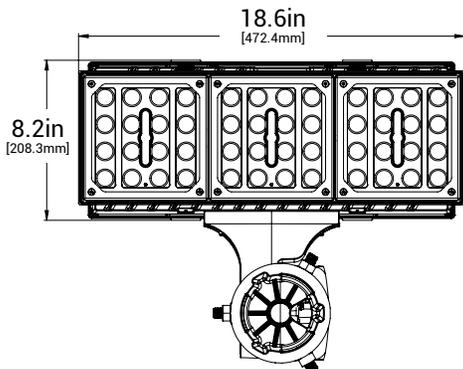
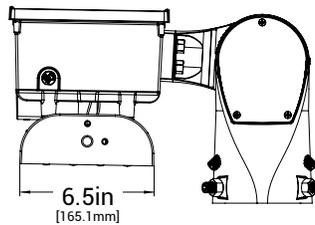
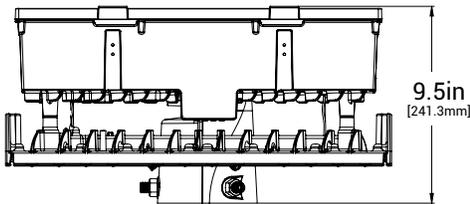
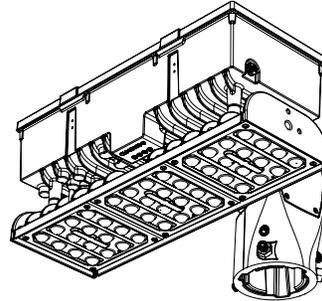
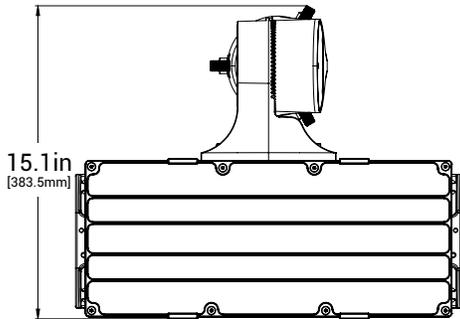
- AAJL (ADJUSTABLE ARM DIRECT POLE MOUNT)
- AAJC (ADJUSTABLE ARM DIRECT POLE MOUNT [CORD THROUGH HOUSING])



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to [Pole Drill Patterns Document](#) for additional support information.

Dimensional & Mounting Details

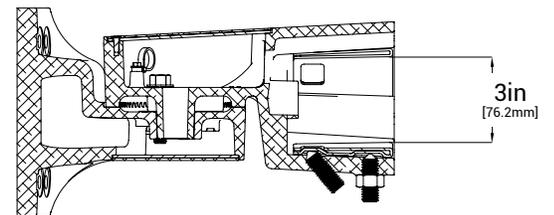
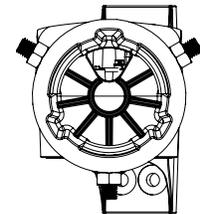
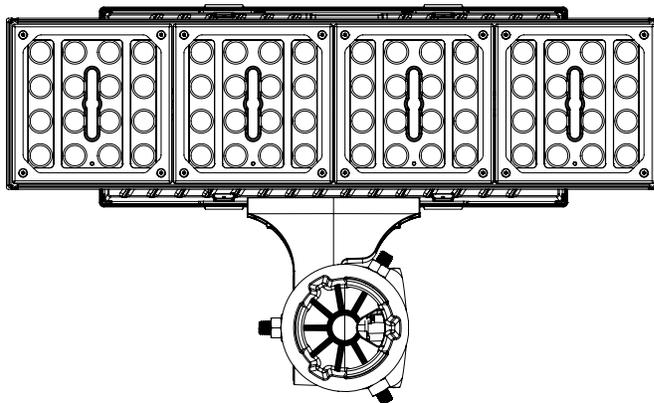
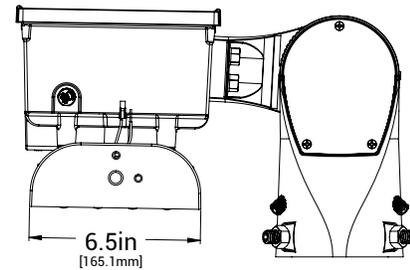
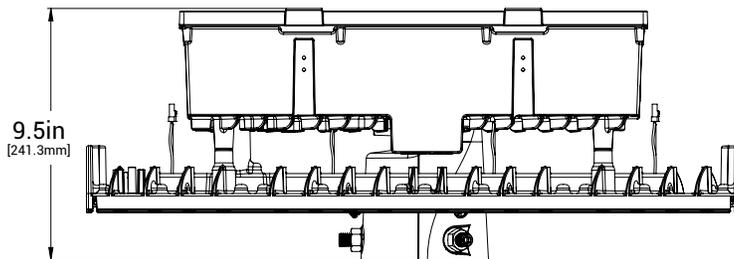
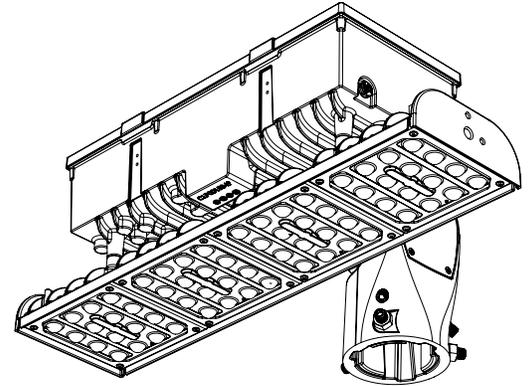
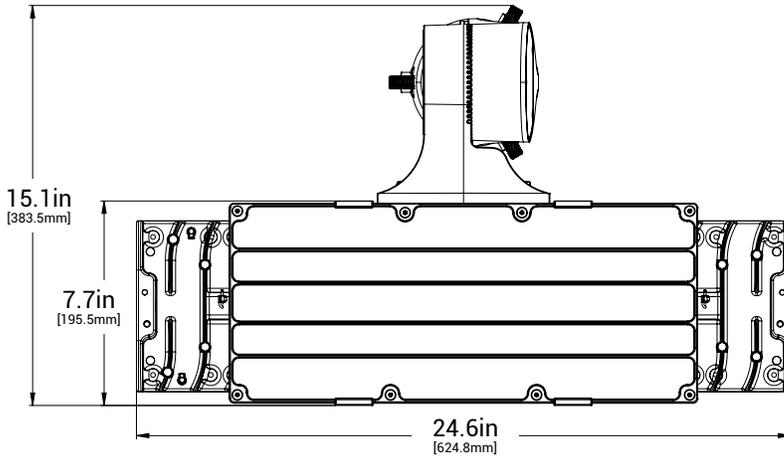
PRODUCT FAMILY: LUMAVISION
 MODEL: 3
 MOUNT TYPE: SLIPFITTER



Note: The slip fitter is only intended to mount on a vertical orientation with a suitable 3 inch diameter pole or accessory tenon top-per. For 2.375 inch tenon sizes, a separate spacer accessory is needed that isn't included with the standard unit.

Dimensional & Mounting Details

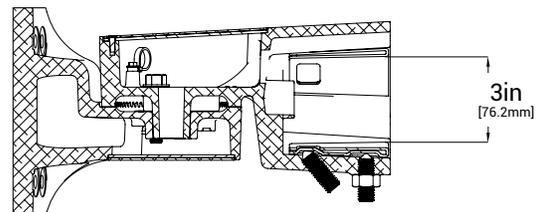
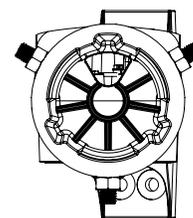
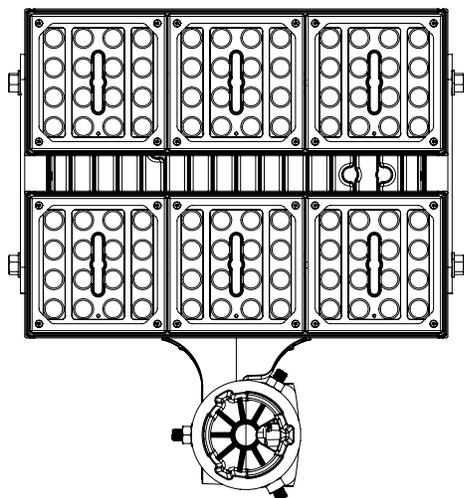
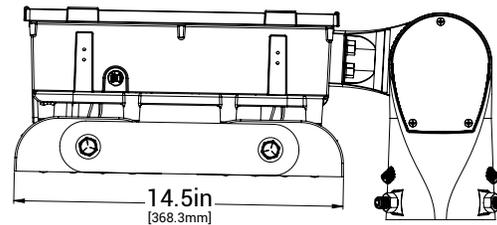
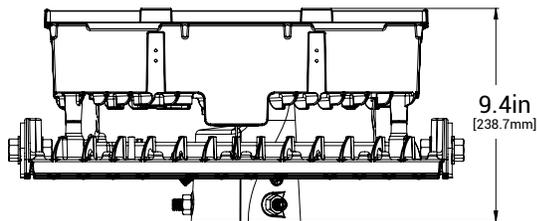
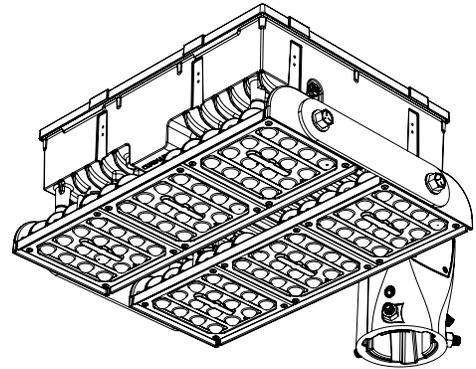
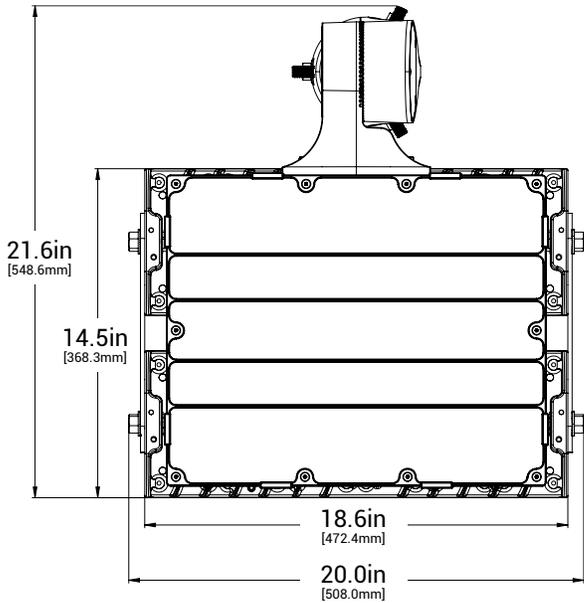
PRODUCT FAMILY: LUMAVISION
 MODEL: 4
 MOUNT TYPE: SLIPFITTER



Note: The slip fitter is only intended to mount on a vertical orientation with a suitable 3 inch diameter pole or accessory tenon topper. For 2.375 inch tenon sizes, a separate spacer accessory is needed that isn't included with the standard unit.

Dimensional & Mounting Details

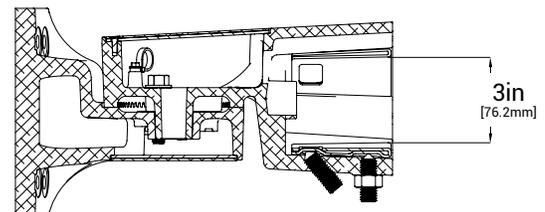
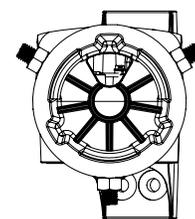
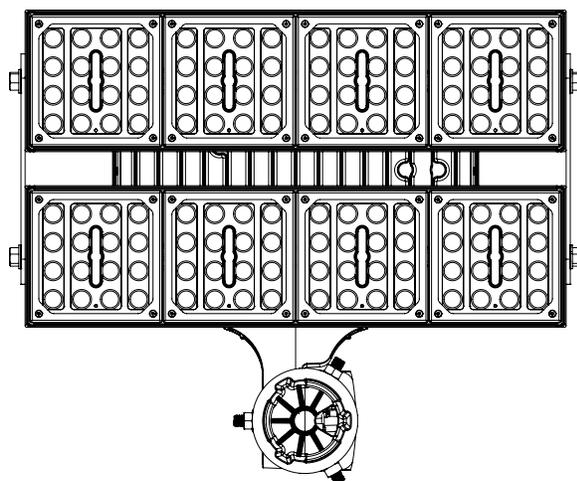
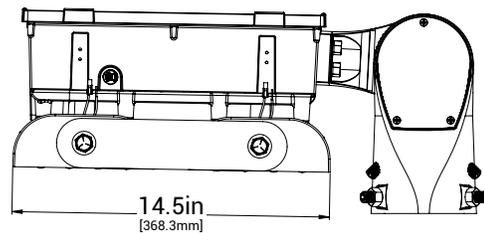
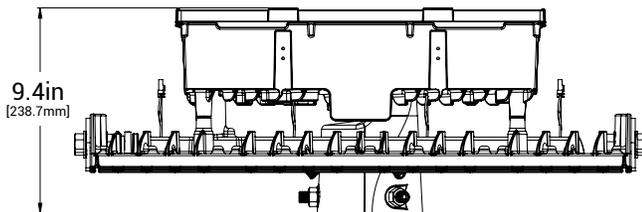
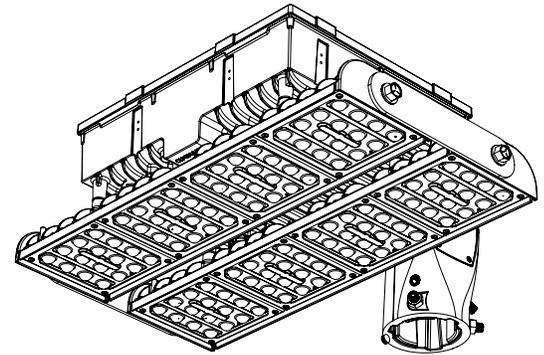
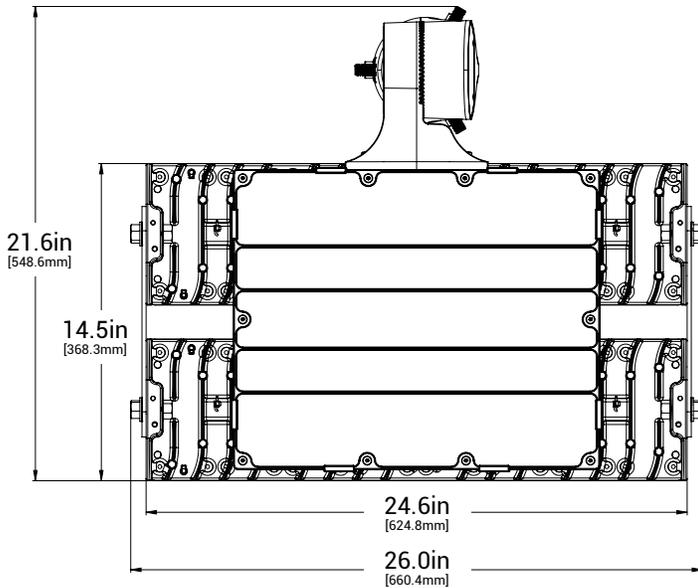
PRODUCT FAMILY: LUMAVISION
 MODEL: 6
 MOUNT TYPE: SLIPFITTER



Note: The slip fitter is only intended to mount on a vertical orientation with a suitable 3 inch diameter pole or accessory tenon topper. For 2.375 inch tenon sizes, a separate spacer accessory is needed that isn't included with the standard unit.

Dimensional & Mounting Details

PRODUCT FAMILY: LUMAVISION
 MODEL: 7 & 8
 MOUNT TYPE: SLIPFITTER



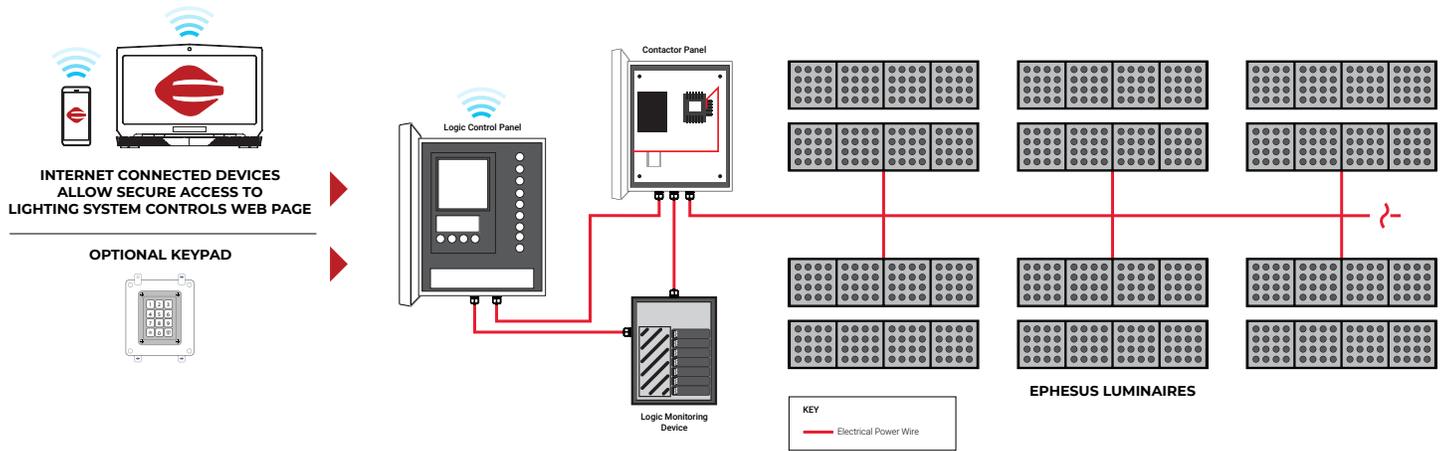
Note: The slip fitter is only intended to mount on a vertical orientation with a suitable 3 inch diameter pole or accessory tenon topper. For 2.375 inch tenon sizes, a separate spacer accessory is needed that isn't included with the standard unit.

Example Topology: Recreation Management Controls

Controls Protocol: Contactor Controls

Example system topology showing the LUMAVISION System in a Wired Contactor Controls Installation.

Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.



Example Topology: Wireless Controls

Controls Protocol: AirMesh

Example system topology showing the LUMAVISION System in a Wireless AirMesh Control Installation.

Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.

