High Performance 4" Aperture (HP-4) - Indirect











Date	

Project

Type

Comments



DESCRIPTION

High Performance 4" Aperture Indirect Pendant (HP-4 I) is a patented, linear LED luminaire with Top Glow™ and Flush Uplight options. Advanced optical design and mid-power LEDs deliver an efficient, long-lasting luminaire free of glare and socket shadows for single and continuous lighting applications.

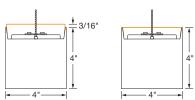
Standard finish is Signal White

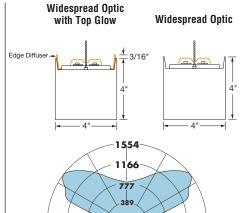


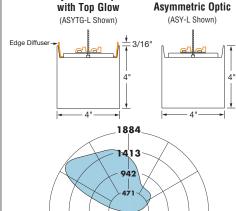
Asymmetric Optic

Top Glow Diffuser (Standard)









Asymmetric Optic

DIMENSIONS & DIFFUSER

A glare-free experience is attained using a precise diffuser to eliminate pixelation.

ORDERING GUIDE: Sample Number: HP-4 I - 32' - S - 835 - TG - 120V - FA - SC - C1 - 0B0

	HP-4 I	H	H	H	H_	H_	H	H	H	
Finelite HP-4 I										
Length (Minimum 2', increments accurate to 1/16" (± 1/32"), standard)		1								
Light Output (S - Standard, B - Boosted Standard, H - High, V - Very High)										
LED CRI/CCT (830 - 80 CRI min, 3000K 930 - 90 CRI min, 3000K										
835 - 80 CRI min, 3500K 935 - 90 CRI min, 3500K										
840 - 80 CRI min, 4000K 940 - 90 CRI min, 4000K)										
Uplight Option (TG - Top Glow (standard), F - Flush, WSO - Widespread Optic, ————										
WSOTG - Widespread Optic with Top Glow, ASY-L - Asymmetric Left Optic	C,									
ASY-R - Asymmetric Right Optic, ASYTG-L - Asymmetric Left Optic with T	op Glow,									
ASYTG-R - Asymmetric Right Optic with Top Glow)										
Voltage (120V, 277V, 347V)										
Mounting (FA - Fully Adjustable) —										
Circuiting (SC - Single Circuit) 1										
Ceiling Type (C1 - 1" T-Bar, C2 - 9/16" T-Bar, C3 - screw slot, C4 - hard ceiling)										
Integrated Sensor 2 (OBO - Occupancy Sensor OBD - Daylight)										J

¹ Contact factory for switching options

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732

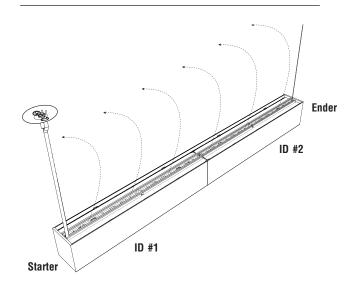
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High Performance 4" Aperture (HP-4) - Indirect

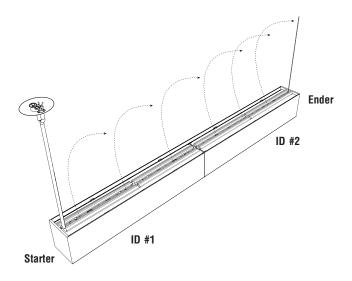
ASYMMETRIC

Use this tool to understand how to specify Asymmetric for your project. The diagrams below show a linear run from power feed to ender. Specify, ASY-L distributes light to the left or ASY-R distributed light to the right.

Asymmetric Left Optic (ASY-L)



Asymmetric Right Optic (ASY-R)



High Performance 4" Aperture (HP-4) - Indirect

PHOTOMETRY

HP-4-I-V-835

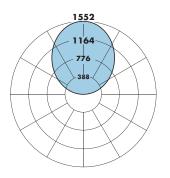
Very High Output - 4' Luminaire Efficacy: 112 lumens per watt

Total luminaire output: 4114 lumens (1029 lumens/foot)

36.8 watts (9.2 watts/foot)

CCT: 3500K CRI: 80

ITL LM79 Report 85127



Candela distribution							
	0.0	22.5	45	67.5	90	Flux	
90	0	0	0	0	0		
95	76	77	79	80	80	88	
105	264	263	267	270	269	283	
115	487	481	482	489	484	479	
125	714	715	714	708	710	637	
135	943	947	947	940	937	727	
145	1161	1151	1166	1155	1151	724	
155	1343	1332	1341	1338	1331	616	
165	1475	1467	1473	1471	1468	414	
175	1542	1542	1543	1543	1542	146	
180	1552	1552	1552	1552	1552		

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire						
S* B* H* V**						
1684	2117	3200	4114			

Light Output, 3500K, 80 CRI (Lumens Per Foot)						
S* B* H* V**						
421	529	800	1029			

Power, 3500K, 80 CRI (Watts Per Foot)						
S* B* H* V**						
3.6	4.6	7.1	9.2			

Efficacy, 3500K, 80 CRI (Lumens Per Watt)							
S* B* H* V**							
117 116 113 112							

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), 4000K, 90 CRI Lumen Adjustment Factor = 0.789

Total Light Output = $3200 \text{ Im } \times 0.789 = 2525 \text{ Im}$

Total Light Output per Foot = $800 \text{ Im/ft} \times 0.789 = 631 \text{ Im/ft}$

watts/foot = 7.1 W/ft

$$Efficacy = \frac{631 \frac{lm}{ft}}{7.1 \frac{W}{ft}} = 89 \text{ Im/W}$$

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732

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^{*} Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V

^{**} Based on ITL report: 85127

High Performance 4" Aperture (HP-4) - Indirect

PHOTOMETRY - WIDESPREAD OPTIC (WSO)

HP-4-I-V-835-WS0

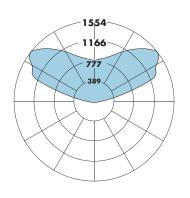
Very High Output - 4' Luminaire Efficacy: 117 lumens per watt

Total luminaire output: 4302 lumens (1076 lumens/foot)

36.8 watts (9.2 watts/foot)

CCT: 3500K CRI: 80

ITL LM79 Report 89033



CANDELA DISTRIBUTION							
	0.0	22.5	45	67.5	90	Flux	
90	0	0	0	0	0		
95	45	80	82	64	64	97	
105	211	271	614	589	472	485	
115	385	434	783	1212	1323	804	
125	503	565	885	1386	1514	852	
135	588	656	915	1294	1462	752	
145	668	723	912	1137	1234	585	
155	737	<i>77</i> 1	882	992	1037	409	
165	790	802	845	884	899	240	
175	816	817	821	825	828	79	
180	819	819	819	819	819		

WIDESPREAD OPTIC

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire						
S* B* H* V**						
1761	2214	3346	4302			

Light Output, 3500K, 80 CRI (Lumens Per Foot)							
S* B* H* V**							
440 553 837 1076							

Power, 3500K, 80 CRI (Watts Per Foot)			
S* B* H* V**			
3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S* B* H* V**			
122	121	119	117

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

- * Family Correlation based on 4' luminaire 3500K Very High Output (V) test 120V
- ** Based on ITL report: 89033

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), 4000K, 90 CRI Lumen Adjustment Factor = 0.789

Total Light Output = $3346 \text{ Im } \times 0.789 = 2640 \text{ Im}$

Total Light Output per Foot = $837 \text{ Im/ft} \times 0.789 = 660 \text{ Im/ft}$

watts/foot = 7.1 W/ft

$$Efficacy = \frac{660 \frac{lm}{ft}}{7.1 \frac{W}{ft}} = 93 \text{ Im/W}$$

High Performance 4" Aperture (HP-4) - Indirect

PHOTOMETRY - ASYMMETRIC OPTIC (ASY)

HP-4-I-V-835-ASYM

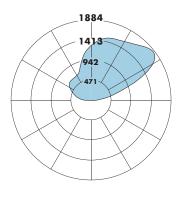
Very High Output - 4' Luminaire Efficacy: 120 lumens per watt

Total Luminaire Output: 4436 lumens (1109 lumens/foot)

36.9 watts (9.2 watts/foot)

CCT: 3500K CRI: 80

ITL LM79 Report 89988



CANDELA DISTRIBUTION						
	0.0	45	90	135	180	Flux
90	0	0	0	0	0	
95	142	146	57	141	1 <i>75</i>	147
105	582	647	207	294	355	431
115	1335	1134	369	414	493	692
125	1861	1288	545	504	620	797
135	1803	1318	724	574	667	745
145	1657	1367	909	644	668	642
155	1581	1432	1084	783	706	513
165	1537	1446	1220	1009	910	345
175	1401	1366	1293	1225	1196	123
180	1302	1302	1302	1302	1302	

ASYMMETRIC OPTIC

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire			
S *	В*	H*	V**
1816	2283	3450	4436

Light Output, 3500K, 80 CRI (Lumens Per Foot)			
S* B* H* V**			
454	571	863	1109

Power, 3500K, 80 CRI (Watts Per Foot)			
\$*	B*	H*	V**
3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S* B* H* V**			
126	124	122	120

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

- * Family Correlation based on 4' luminaire 3500K Very High Output (V) test 120V
- ** Based on ITL report: 89988

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), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output = 3450 lm x 0.789 = 2722 lm

Total Light Output per Foot = 863 lm/ft x 0.789 = 681 lm/ft

watts/foot = 7.1 W/ft

$$Efficacy = \frac{681 \frac{lm}{ft}}{7.1 \frac{W}{ft}} = 96 \text{ Im/W}$$

High Performance 4" Aperture (HP-4) - Indirect

SPECIFICATIONS —

CONSTRUCTION: Precision-cut 6061-T6 extruded aluminum body. Internal joiner system, plug-together wiring, standard.

ENDCAPS: Flat diecast aluminum endcaps add 1/4" to each end of luminaire.

MITERED CORNERS: Illuminated 90° corners in a single plane, with Top Glow™ and Flush Uplight options. Custom angles are available (90° minimum on inside corners), contact factory.

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

UPLIGHT OPTION: Patented Top Glow frost white diffuser standard. 12 ft. maximum diffuser length. 73% transmissive. 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Optional: Flush frost white snap-in diffuser, 73% transmissive, 99% diffusion; Widespread Optic (WSO) and Widespread Optic with Top Glow (WSOTG); WSO enables increased luminaire spacing with improved ceiling uniformity. Asymmetric optic directs light in a specific direction. ASY-L distributes light to the left, ASY-R distributed light to the right of the luminaire. See page 2.

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 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%. 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. Dali driver also available; Contact factory.

LUTRON DRIVER OPTIONS: LUTES1 (Hi-lume 1% EcoSystem with Soft-On, Fade to Black dimming (LDE1 series)); LUTES5 (5-Series 5% EcoSystem (LDE5 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. Factorychoice low-profile backup battery available. 8 ft. minimum luminaire length for low profile battery pack. Bodine BSL722 battery pack also available; 4 ft. minimum luminaire length. Backup batteries deliver 2057 lumens. Half of a 4 ft. section will be illuminated in emergency mode.

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) occupancy or daylight sensors available. Refer to Occupancy Sensor and Daylight Sensor tech sheets for more info.

MOUNTING: 50" Fully Adjustable (FA) plated steel aircraft cable with safety stop hardware standard. Contact factory for additional lengths up to 150".

FINISHES: Finelite Signal White powder coat standard. Optional Adders: 185 RAL colors.

FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when luminaire current exceeds 5 amps.

LENGTHS: Any length, 2-foot minimum, in increments down to 1/16" (± 1/32"). 12-foot maximum section length.

LABELS: Fixture and electrical components are ETLlisted 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. Damp Location. 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.

WEIGHT: 2.8 lb/ft.

DLC QUALIFIED: Configurations of this product are listed on the DLC Qualified Prodcuts List (QPL). www.designlights.org/search

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

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