

# FINELITE

## High Performance Recessed (HPR LED) 1x4, Air Return



HPR LED Collection  
2011 IES Progress  
Report Selection



Date

Project

Type

Comments

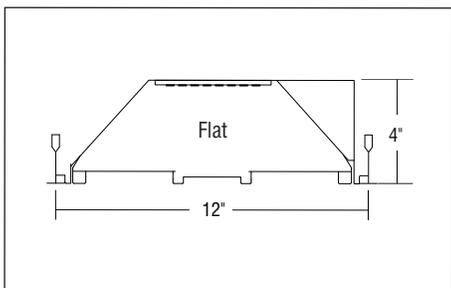
Declare.



Refer to page 2 for all door styles

### DESCRIPTION

HPR LED AR 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. HPR Air Return effectively removes air from the space with little change to the luminaire's aesthetic. 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.

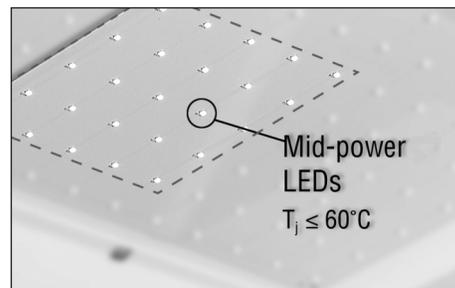


**DIMENSIONS**



### 100% SERVICEABLE FROM BELOW

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

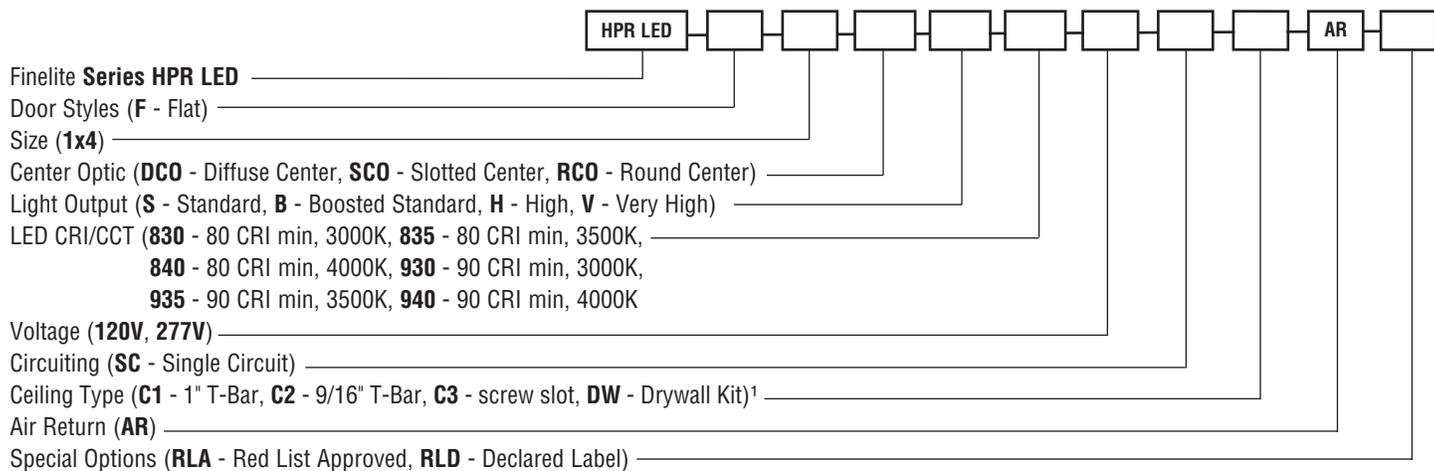


### THERMAL MANAGEMENT

Mid-power LEDs allow heat to be fully dissipated without the need for additional heat sinks.

### ORDERING GUIDE

Sample Number: HPR LED - F - 1x4 - DCO - S - 835 - 277V - SC - C1 - AR - RLA



<sup>1</sup>Surface Mount available

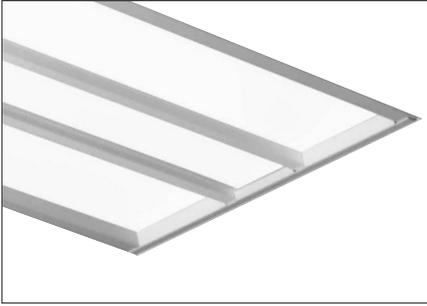
A brand of **legrand**

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### DOOR STYLES

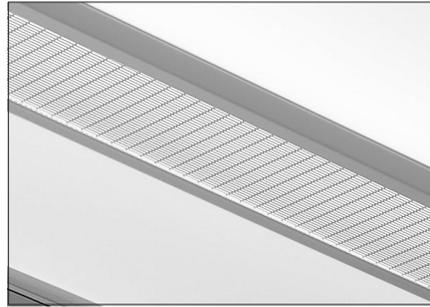


F - Flat

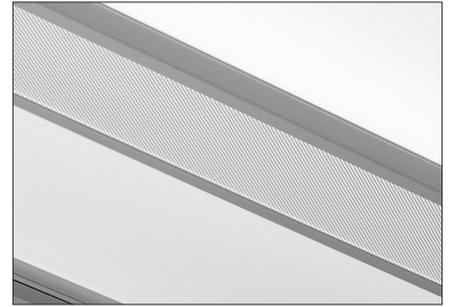
### CENTER OPTICS



DCO - Diffuse Center



SCO - Slotted Center



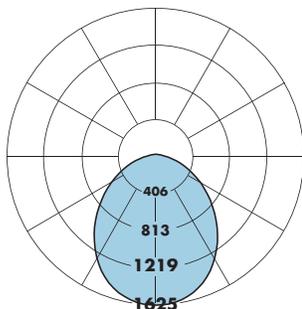
RCO - Round Center

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### PHOTOMETRY

HPR LED-F-1x4-DCO-B  
 Boosted Output - Angled Rail  
 Efficacy: 107 lumens per watt  
 Total luminaire output: 3985 Lumens  
 37.1 Watts  
 Peak Candela Value: 1625 @ 0°  
 CCT: 3500K  
 ITL LM79 Report 85141



CANDLEPOWER SUMMARY						
	0.0	22.5	45.0	67.5	90.0	Flux
0	1625	1625	1625	1625	1625	
5	1616	1617	1618	1618	1618	154
10	1590	1588	1593	1594	1591	
15	1543	1540	1549	1549	1545	435
20	1478	1474	1483	1480	1475	
25	1400	1393	1399	1393	1386	642
30	1304	1297	1299	1288	1277	
35	1194	1189	1184	1168	1156	737
40	1077	1071	1061	1039	1028	
45	953	946	929	907	896	715
50	828	822	800	775	763	
55	703	695	670	646	637	600
60	581	572	548	522	511	
65	461	453	429	401	393	424
70	346	340	315	290	283	
75	239	234	211	190	184	225
80	147	138	117	100	94	
85	65	55	38	32	30	53
90	0	0	0	0	0	

Flat (F) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B**	H*	V*
3099	3985	4509	5873
Power, 3500K, 80 CRI (Watts)			
S*	B**	H*	V*
28.5	37.1	42.8	58.1
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B**	H*	V*
109	107	105	101

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.

\* Family Correlation based on 3500K Boosted Standard Output (B) test - 120V.  
 \*\* Based on ITL report: 85141

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

### SAMPLE LUMEN ADJUSTMENT CALCULATION

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

Lumen Adjustment Factor = 0.789

Total Light Output =  
 4509 lm x 0.789 = 3558 lm

$$\text{Efficacy} = \frac{3558 \text{ lm}}{42.8 \text{ W}} = 83 \text{ lm/W}$$

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### 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.

**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.

**CENTER OPTIC OPTIONS:** *Only available with 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:  $\geq 0.9$ . Total Harmonic Distortion (THD): <20%. Expected driver lifetime: 170,000 hours.

**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. Chicago Plenum option. Factory-choice low-profile backup battery available. Bodine BSL722 battery pack also available. Backup batteries deliver 1992 lumens. One half of the 1x4 will be illuminated in emergency mode.

**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 version available; refer to separate tech sheet.

**AIR RETURN:** Luminaire tested in accordance with ADC1062 and ASHRAE 70. Air Return slots positioned on the center optic. Diffuse Center Optic (DCO) is placed above the air return slots. Other center optics are positioned below the air return slots.

**FINISH:** Housing and door assembly painted with 96 LG high reflectance matte white powder coat paint. Available in matte white only. Optional adder: Antimicrobial paint is available. 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. 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. Finelite makes the specification process easy when putting healthier products on your projects. Simply add – **RLA** (Red List Approved) or – **RLD** (Declared Label) to your part number.

**WEIGHT:** 25 lbs maximum.

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