💶 ED 😻 BUY AMERICAN ACT OF 2009 COMPLIANT

# High Performance Recessed (HPR LED-EP) 2x2, Air Return,

Standard Output (S), Boosted Standard Output (B)

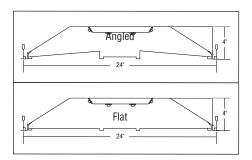


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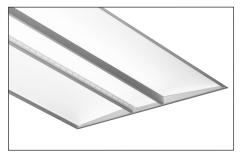
## DESCRIPTION

FINELITE

HPR LED-EP Air Return is a highly effective luminaire delivering excellent visual comfort and outstanding performance. This enhanced performance luminaire features a very uniform diffuser aesthetic. Advanced optical designs make the HPR LED-EP Air Return a powerful solution for lowceiling applications and eliminate the shadows common to other LED products. HPR-LED Air Return effectively removes air from the space with little change to the luminaire 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



**TWICE THE UNIFORMITY** 

HPR LED-EP uses new LED arrays and materials to deliver a diffuser that is twice as uniform when compared to standard luminaires.

Mid-power LEDs ∕ Tj ≤ 60°C	

# THERMAL MANAGEMENT

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

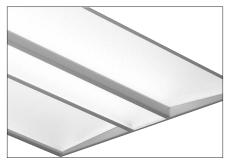
## **ORDERING GUIDE**

Sample Number: HPR LED-EP - A - 2x2 - DCO - S - 835 - 277V - SC - C1 - AR - RLA

HPR LED-EP
Door Styles ( <b>A</b> - Angled, <b>F</b> - Flat)
Size (2x2)
Center Optic ( <b>DCO</b> - Diffuse Center, <b>SCO</b> - Slotted Center, <b>RCO</b> - Round Center)
Light Output (S - Standard, B - Boosted Standard)
LED CRI/CCT (830 - 80 CRI min, 3000K, 835 - 80 CRI min, 3500K,
840 - 80 CRI min, 4000K, 930 - 90 CRI min, 3000K,
935 - 90 CRI min, 3500K, 940 - 90 CRI min, 4000K
Voltage ( <b>120V</b> , <b>277V</b> )
Circuiting ( <b>SC</b> - Single Circuit) Ceiling Type ( <b>C1</b> - 1" T-Bar, <b>C2</b> - 9/16" T-Bar, <b>C3</b> - screw slot, <b>DW</b> - Drywall Kit) <sup>1</sup>
Air Return ( <b>AR</b> )
Special Options ( <b>RLA</b> - Red List Approved, <b>RLD</b> - Declared Label)
<sup>1</sup> Surface Mount available A brand of Degrand
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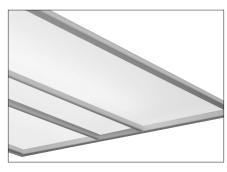
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# **DOOR STYLES**



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A - Angled

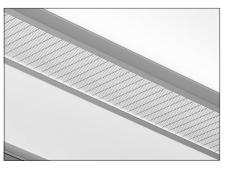


F - Flat

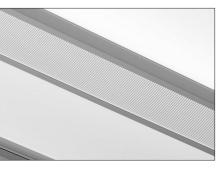
# **CENTER OPTICS**



**DCO - Diffuse Center** 



**SCO - Slotted Center** 



**RCO - Round Center** 

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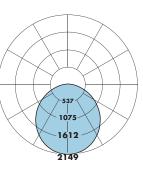
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# FINELITE

# High Performance Recessed (HPR LED-EP) 2x2, Air Return, Standard Output (S), Boosted Standard Output (B)

# PHOTOMETRY

HPR LED-EP-F-2x2-DCO-S Standard Output - Flat Rail Efficacy: 108 lumens per watt Total luminaire Output: 3099 Lumens 22.9 Watts Peak Candela Value: 2149 @ 0° CCT: 3500K ITL LM79 Report: 85144



Angled (A) and Flat (F) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B**		
3099 3984			
Power, 3500K, 80 CRI (Watts)			
S*	B**		
28.6	37.2		
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B**		
108	107		

\* Family Correlation based on 3500K Very High Output (V) test - 120V. \*\* Based on ITL report: 85144

Angled Narrow Rail (ANR) Total Light Output, 3500K, 80 CRI (Lumens)			
S¥	B <sup>¥</sup>		
3059	3933		
Power, 3500K, 80 CRI (Watts)			
S¥	₿¥		
28.6	37.3		
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S¥	B <sup>¥</sup>		
107	105		

\* Family Correlation based on 3500K Very High Output (V) test - 120V.  $^{\rm V}$  Based on ITL report: 85150

S - Standard Output, B - Boosted Standard Output

CANDLEPOWER SUMMARY						
	0.0	22.5	45	67.5	ACROSS	Flux
0	2149	2149	2149	2149	2149	
5	2139	2139	2139	2139	2139	203
10	2109	2109	2107	2106	2106	
15	2051	2052	2052	2054	2054	579
20	1975	1975	1978	1981	1983	
25	1879	1880	1883	1890	1894	868
30	1769	1769	1773	1783	1786	
35	1645	1643	1649	1662	1665	1033
40	1508	1507	1515	1527	1531	
45	1362	1361	1368	1380	1386	1057
50	1209	1207	1214	1226	1230	
55	1048	1046	1052	1060	1063	941
60	882	879	883	889	891	
65	712	708	708	713	718	703
70	539	538	534	536	540	
75	370	367	363	365	368	388
80	214	211	206	208	208	
85	84	82	78	79	80	97
90	0	0	0	0	0	

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

Standard	Output (	(S)	Angled	(A)	) &	Flat	(F)
<u>4000K, 90 CRI</u>							

*Lumen Adjustment Factor* = 0.789

*Total Light Output* = 3099 Im x 0.789 = 2445 Im

 $Efficacy = \frac{2445 \ lm}{28.5 \ W} = 86 \ \text{Im/W}$ 

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# **CEILING SYSTEM INFORMATION**

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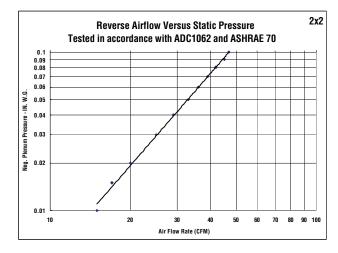
9/16" T-Bar

15/16" T-Bar



Screw Slot T-Bar

#### AIR HANDLING INFORMATION



#### 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 96 LG high reflectance matte white powder coat paint.

**OPTICAL SYSTEM:** Optical system components include diffuser panels and a center 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 center optic or parallel to the ceiling plane.

**CENTER OPTIC OPTIONS:** Only available with Angled (A) and Flat (F) door styles.

Diffuse Center Optic (**DCO**): UV-stabilized and impactresistant 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:** Two lumen packages available, Standard (S) and Boosted Standard (B). 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%.

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:** 120V or 277V prewired. In accordance with NEC Code 41.73 (G) this luminaire contains an internal driver disconnect. Optional Chicago Plenum available. Contact factory. Low profile battery backup available. Battery backup delivers 2199 lumens.

**MOUNTING:** Standard flange design works with most lay-in ceiling types. Integral pryout tabs secure luminaire to ceiling grid from above. Luminaire offers tie-in locations for tie-wire on all corners. Consult local code for appropriate tie-wire recommendations. Drywall Kit available. Surface mount version available; see separate tech sheet.

**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: 16 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.

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