



HPR LED Collection
2011 IES Progress
Report Selection



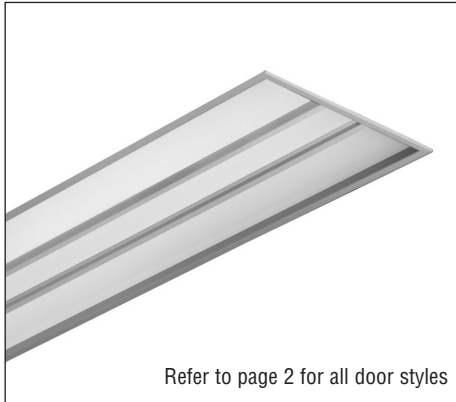
Date

Project

Type

Comments

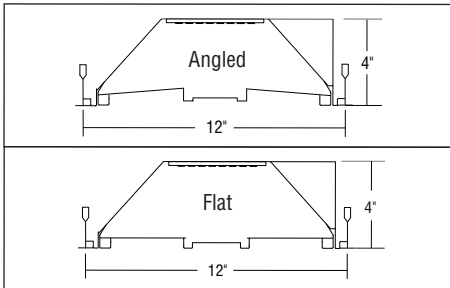
Declare.



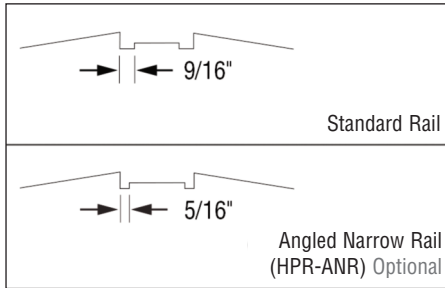
DESCRIPTION

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



ANGLED 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.

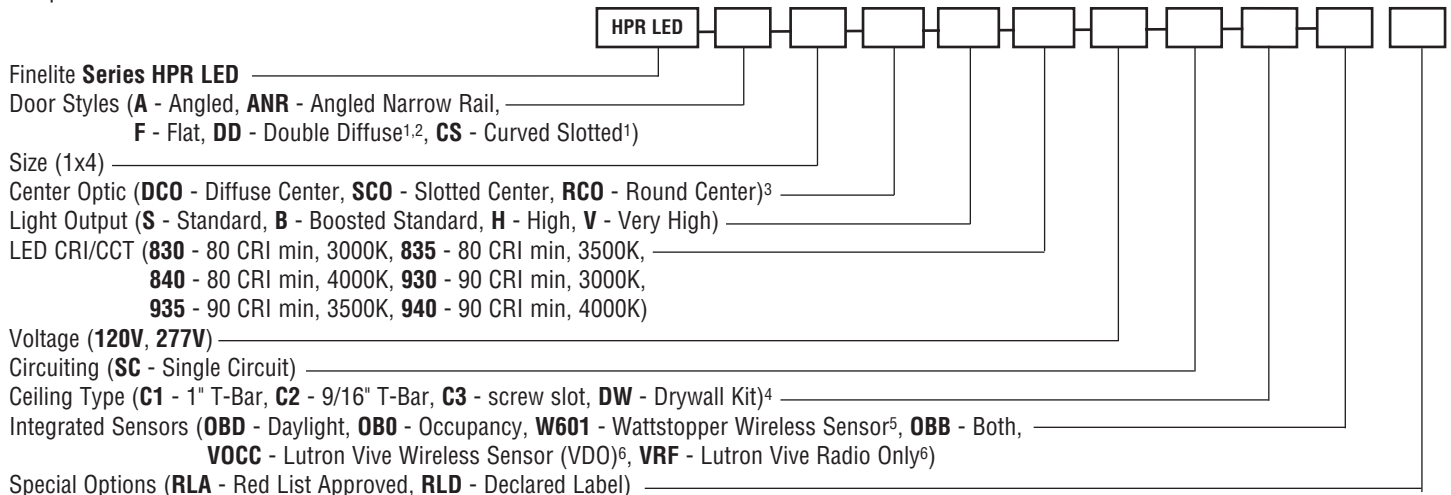


100% SERVICEABLE FROM BELOW

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

ORDERING GUIDE

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



¹ Not available with Center Optic options

² Not available with sensors

³ Only available with Angled (A), Angled Narrow Rail (ANR) and Flat (F) door options

⁴ Surface Mount available

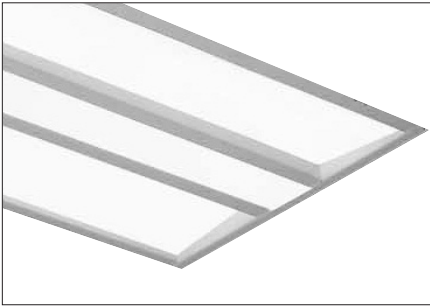
⁵ LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected.

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

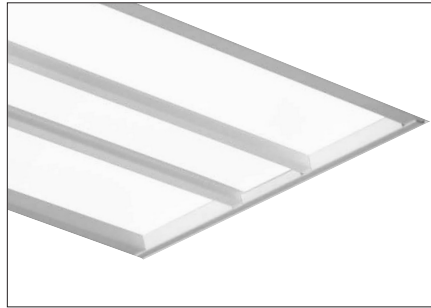
⁶ Lutron Vive Integrated Sensors require a DALI driver

A brand of **legrand**

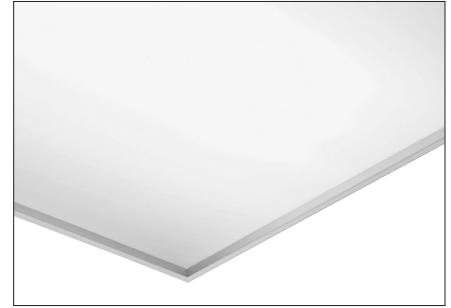
DOOR STYLES



A - Angled
ANR - Angled Narrow Rail



F - Flat



DD - Double Diffuse



CS - Curved Slotted

CENTER OPTICS



DCO - Diffuse Center



SCO - Slotted Center

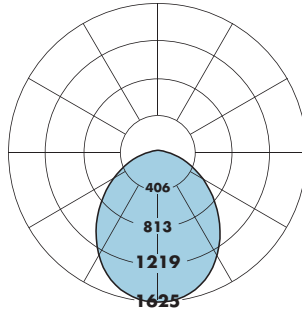


RCO - Round Center

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

PHOTOMETRY

HPR LED-F-1x4-DCO-B
 Boosted Standard 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



CANDELA DISTRIBUTION						
	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	

Angled (A) and 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

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

Angled Narrow Rail (ANR) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B¥	H*	V*
2998	3855	4362	5681
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*
105	104	102	98

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output
 * Family Correlation based on 3500K Boosted Standard Output (B) test - 120V.
 ¥ Based on ITL report: 85147

Double Diffuse (DD) Total Light Output, 3500K, 80 CRI (Lumens)			
S*	B±	H*	V*
2715	3491	3950	5145
Power, 3500K, 80 CRI (Watts)			
S*	B±	H*	V*
28.3	36.9	42.6	57.8
Efficacy, 3500K, 80 CRI (Lumens Per Watt)			
S*	B±	H*	V*
96	95	93	89

* Family Correlation based on 3500K Boosted Standard Output (B) test - 120V.
 ± Based on ITL report: 85143

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

$$\text{Lumen Adjustment Factor} = 0.789$$

$$\text{Total Light Output} = 4509 \text{ lm} \times 0.789 = 3558 \text{ lm}$$

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

A brand of **legrand**

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. They are either angled toward the central optic or parallel to the ceiling plane. The standard center rails are approximately 9/16" wide. Optional narrow rails are approximately 5/16" wide.

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: 170,000 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 1992 lumens. One half of the 1x4 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: 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.