

FINELITE

Tunable White High Performance Recessed (HPR LED) 2x4

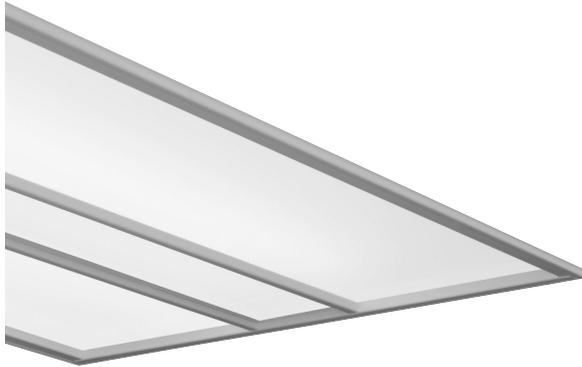


Date

Project

Type

Comments



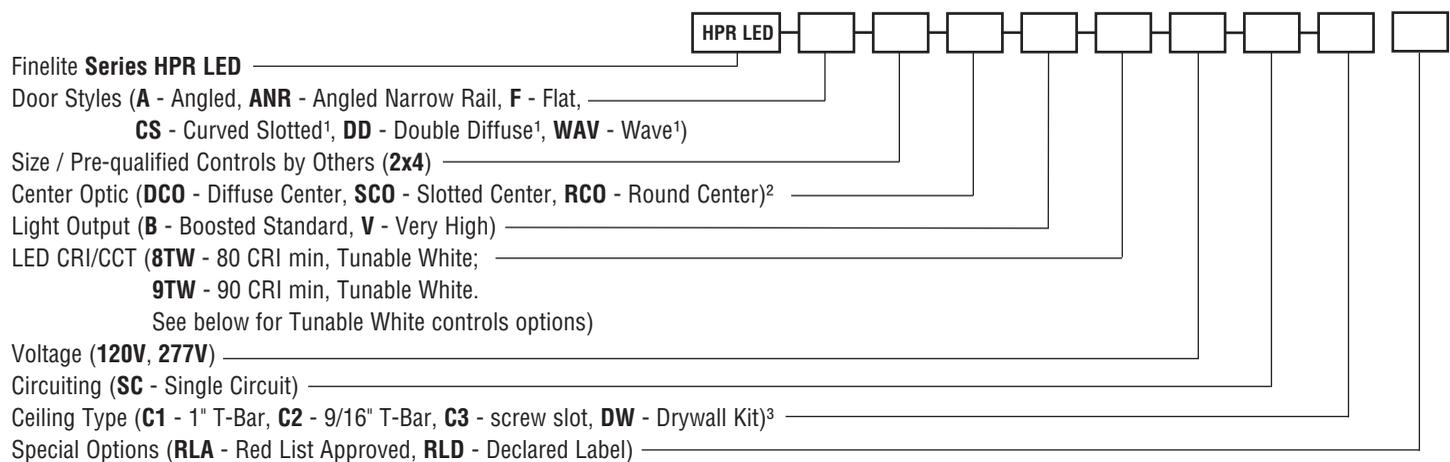
Refer to page 3 for all door styles

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.

ORDERING GUIDE

Sample Number: HPR LED - A - 2x4 - DCO - B - 8TW - 277V - SC - C1 - RLA



¹ Curved Slotted, Double Diffuse and Wave door not available with Center Optic options
² Only available on Angled (A), Angled Narrow Rail (ANR), and Flat (F)
³ Surface Mount available

TUNABLE WHITE CONTROLS OPTIONS: SELECT ONE



FineTune controller with FineTune DMX Driver

OR

- Controls by others with pre-qualified DMX driver
- Controls by others with pre-qualified DALI driver
- Controls by others with pre-qualified PoE setup
- Controls by Lutron with pre-qualified Lutron driver

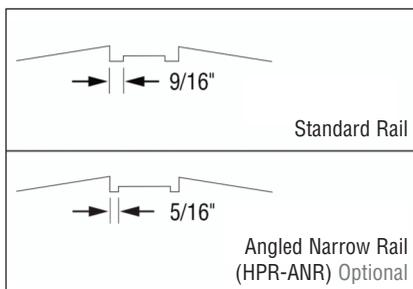
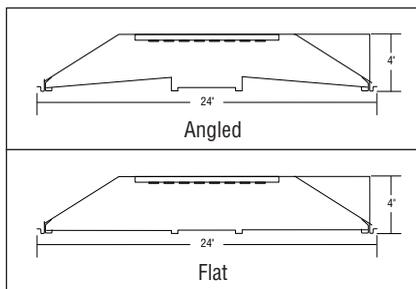
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LUMINAIRE FEATURES



DIMENSIONS

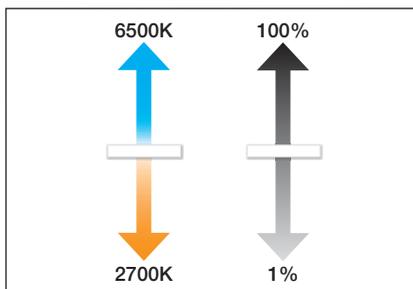
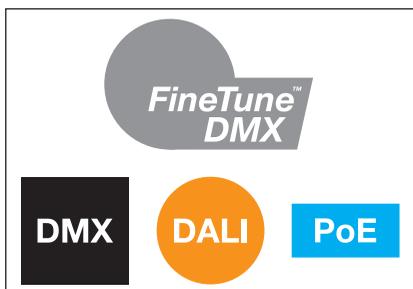
NARROW RAIL OPTION

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.

100% SERVICEABLE FROM BELOW

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

TUNABLE WHITE FEATURES



MULTIPLE CONTROL ARCHITECTURES

Finelite's FineTune™ DMX, qualified DMX, DALI (open and proprietary), or PoE (Power over Ethernet).

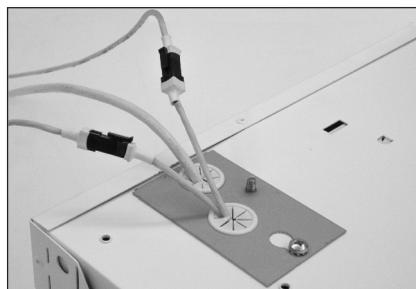
TUNABLE WHITE

Any CCT between 2700K and 6500K with excellent CRI and R9 values; dimming from 100% to 1%.

FINETUNE SYSTEM

Award-winning control system, which includes intuitive wall mounted controller, power control center, driver, and mobile app to easily tailor lighting to match user preference.

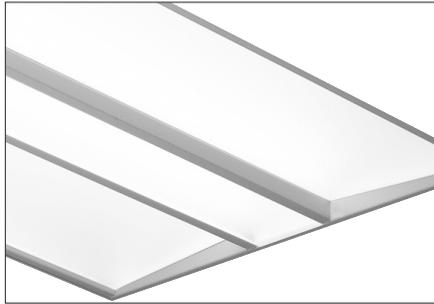
DMX CONNECTION



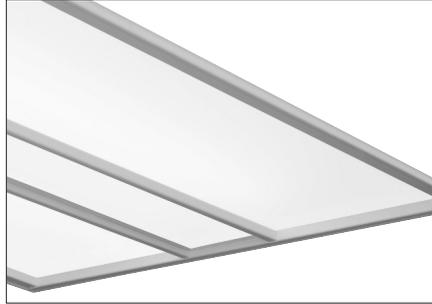
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DOOR STYLES



A - Angled
ANR - Angled Narrow Rail

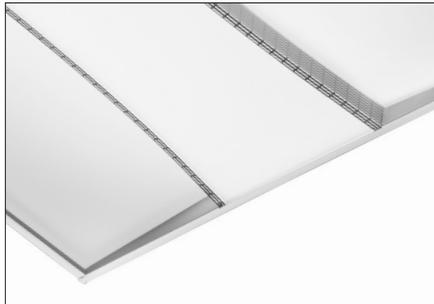


F - Flat

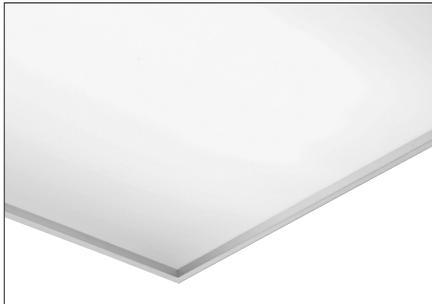


WAV - Wave

DOOR STYLES



CS - Curved Slotted



DD - Double Diffuse

CENTER OPTICS



DCO - Diffuse Center



SCO - Slotted Center



RCO - Round Center

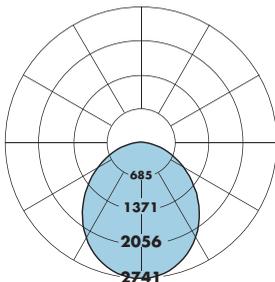
DCO, SCO, and RCO are only available on Angled (A), Angled Narrow Rail (ANR), and Flat (F) doors.

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Tunable White High Performance Recessed (HPR LED) 2x4

PHOTOMETRY

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



CANDELA DISTRIBUTION						
	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)	
B*	V**
4742	6979
Power, 3500K, 80 CRI (Watts)	
B*	V**
38.7	60.6
Efficacy, 3500K, 80 CRI (Lumens Per Watt)	
B*	V**
123	115

B - Boosted Standard Output, V - Very High Output
 * Family Correlation based on 3500K 80 CRI Very High Output (V) test - 120V
 ** Based on ITL report: 85145

Angled Narrow Rail (ANR) Total Light Output, 3500K, 80 CRI (Lumens)	
B*	V^y
4626	6808
Power, 3500K, 80 CRI (Watts)	
B*	V^y
38.6	60.5
Efficacy, 3500K, 80 CRI (Lumens Per Watt)	
B*	V^y
120	113

B - Boosted Standard Output, V - Very High Output
 * Family Correlation based on 3500K 80 CRI Very High Output (V) test - 120V
^y Based on ITL report: 85151

Lumen Adjustment Factors - 80 CRI	
2700K	0.968
3000K	0.985
3500K	1.000
4000K	1.032
6500K	1.032

Lumen Adjustment Factors - 90 CRI	
2700K	0.731
3000K	0.746
3500K	0.760
4000K	0.789
6500K	0.789

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

SAMPLE LUMEN ADJUSTMENT CALCULATION

$$\frac{\text{Boosted Standard Output (B)}}{\text{Angled (A) \& Flat (F) 4000K, 90 CRI}}$$

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

$$\text{Total Light Output} = 4742 \text{ lm} \times 0.789 = 3741 \text{ lm}$$

$$\text{Efficacy} = \frac{3741 \text{ lm}}{38.7 \text{ W}} = 97 \text{ lm/W}$$

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Wave (WAV) Total Light Output, 3500K, 80 CRI (Lumens)	
B*	V†
4804	7069
Power, 3500K, 80 CRI (Watts)	
B*	V†
38.7	60.6
Efficacy, 3500K, 80 CRI (Lumens Per Watt)	
B*	V†
124	117

B - Boosted Standard Output, V - Very High Output

* Family Correlation based on 3500K 80 CRI Very High Output (V) test - 120V

† Based on ITL report: 85837

Curve Slotted (CS) Total Light Output, 3500K, 80 CRI (Lumens)	
B*	V‡
4486	6602
Power, 3500K, 80 CRI (Watts)	
B*	V‡
38.7	60.6
Efficacy, 3500K, 80 CRI (Lumens Per Watt)	
B*	V‡
116	109

B - Boosted Standard Output, V - Very High Output

* Family Correlation based on 3500K 80 CRI Very High Output (V) test - 120V

‡ Based on ITL report: 86020

Double Diffuse (DD) Total Light Output, 3500K, 80 CRI (Lumens)	
B*	V±
3867	5691
Power, 3500K, 80 CRI (Watts)	
B*	V±
38.7	60.6
Efficacy, 3500K, 80 CRI (Lumens Per Watt)	
B*	V±
100	94

B - Boosted Standard Output, V - Very High Output

* Family Correlation based on 3500K 80 CRI Very High Output (V) test - 120V

± Based on ITL report: 85156

Lumen Adjustment Factors - 80 CRI	
2700K	0.968
3000K	0.985
3500K	1.000
4000K	1.032
6500K	1.032

Lumen Adjustment Factors - 90 CRI	
2700K	0.731
3000K	0.746
3500K	0.760
4000K	0.789
6500K	0.789

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

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Due to continuing product improvements, Finelite reserves the right to change specifications without notice. Please visit www.finelite.com for most current data.

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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.

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. They are either angled toward the central optic or parallel to the ceiling plane. The center optical element is held in place by sleek steel rails. The standard center rails are approximately 9/16" wide. Optional narrow 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, 1/8" thick. Inner diffuser: 1/8" 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. Standard with Wave.

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, Boosted Standard (B) 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.

TUNABLE WHITE DRIVER: Replaceable LED driver accessible from below the ceiling. 120/277V. Power factor ≥0.90. Total Harmonic Distortion (THD): <20%. Dimming Range: 100% - 1%. Expected driver lifetime: 100,000 hours.

LUTRON DRIVER OPTIONS: LutDTW (1% T-Series 2-Channel Digital Tunable White (PSQ Series)).

ELECTRICAL:

Emergency Option DMX: Battery backup only.

Emergency Option DALI: Battery backup, emergency-to-generator/ inverter wiring.

Emergency Option Lutron: Battery backup, emergency-to-generator/ inverter wiring.

Emergency Option PoE: Contact factory.

Battery Backup: Factory-choice low-profile backup battery available. Backup batteries deliver 2305 lumens. One quarter of the 2x4 will be illuminated in emergency mode. Backup battery will operate at 6500K in emergency.

Chicago Plenum: Available on request.

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 and Surface Mount versions available; refer to separate tech sheets.

DMX INTERCONNECTION CABLES: Luminaires are prewired with plug-and-play interconnection cables to support easy plug-together joining of luminaire runs. If a non-FineTune DMX system has been specified, a DMX to RJ45 converter is provided.

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

FEED: Standard with one 18-gauge single-circuit feed. 14-gauge feed available on request. DMX and power feed at same location (standard). Optional whips (with flex connectors) supplied in a maximum of 11' lengths. Lead Wires. DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

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. 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: 33 lbs maximum.

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

TUNABLE WHITE PRE-QUALIFIED DRIVERS BY OTHERS

DMX	DALI	POE set up	LUTRON
EldoLED	EldoLED, Crestron	Contact Factory	LUTRON

NOTE: For a complete list of system option/limitations [please click here](#).