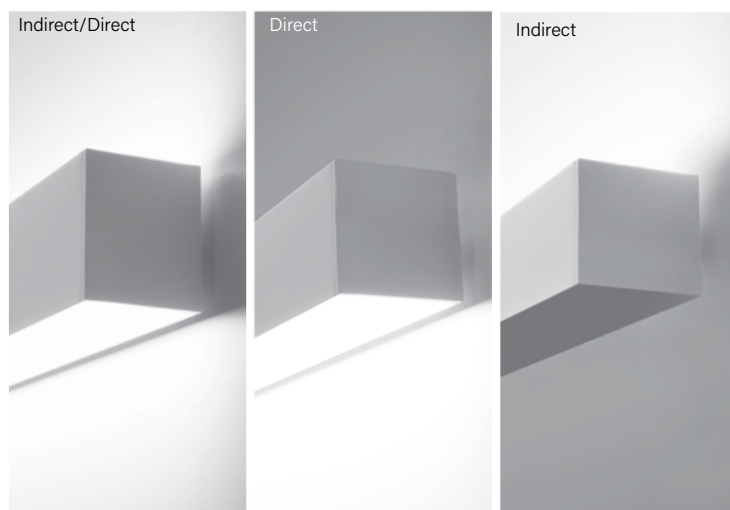


Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount



Indigo-Clean Technology is a Continuous Environmental Disinfection System that emits a narrow spectrum light that kills bacteria, Influenza-A<sup>1</sup>, and SARS-CoV-2 – the virus that causes COVID-19<sup>1</sup> – and is proven effective by recently conducted independent lab testing. Unlike UV disinfection, Indigo-Clean Technology is designed to safely and continuously disinfect a space while it is fully occupied.

**Single-Mode Indigo-Clean Technology** utilizes a combination of blended white LEDs and 405nm LEDs on a single circuit board design. When the luminaires are on, the disinfection is active.

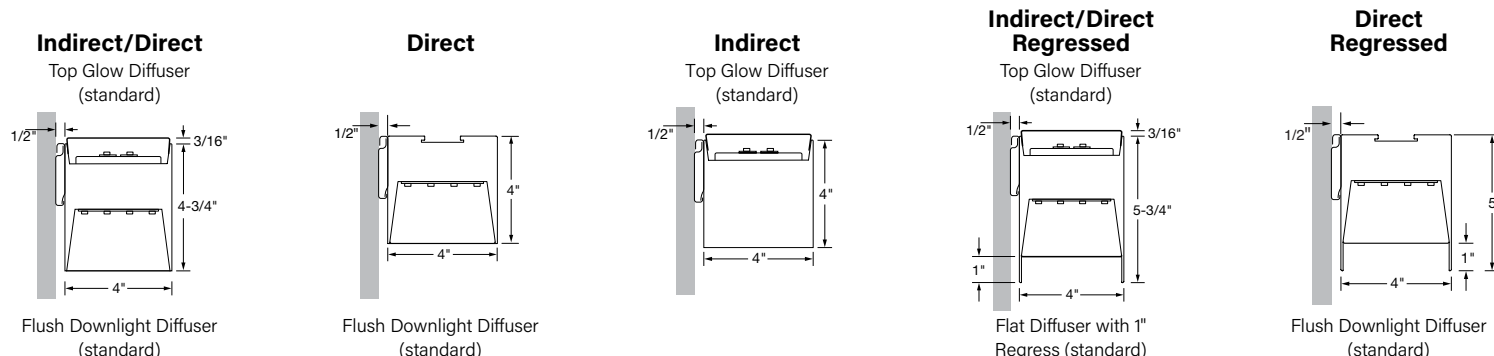
**Dual-Mode Indigo-Clean Technology** utilizes a mid-power of blended white LEDs and 405nm LEDs on a two circuit board design and full 405nm indigo light using a automated controls to disinfect the space. When the space is unoccupied, it utilizes just the 405nm LEDs with increased output to increase disinfection efficacy.

These products are enrolled in the International Living Future Institute (ILFI). Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

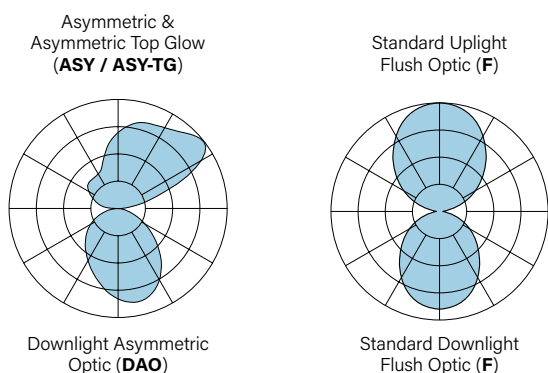
Signal White is standard finish

**Note:** see page 6 for all aesthetic options

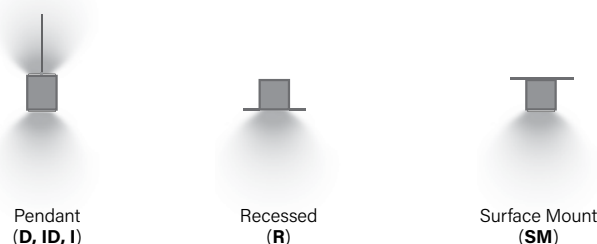
## CROSS SECTIONS



## OPTIC OPTIONS



## ALSO AVAILABLE IN



**Declare.**



<sup>1</sup> Indigo-Clean Research Reports

Indigo-Clean is a registered trademark of Kenall Manufacturing Co., a Legrand Company

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

Ordering Guide Example: HP - 4 - WM - ID - 36' - H - H - 837 - F - F - 96LG - 120 - SC - FC-10% - MB - FE - SW - LGD18W - OBO - CP

## BODY TYPE

## OUTPUT and LED TYPE

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Run	Uplight Output ID & I Only (Flush)	Downlight Output ID & D Only (Flush)
HP - High Performance	4	WM - Wall Mount WM RG - Wall Mount Regressed <sup>1</sup>	D - Direct ID - Indirect/Direct I - Indirect	<div></div> Minimum 2' section length. Increments accurate to 1/16" (±1/32"), standard. 12' maximum section length.	H - High (756 lm/ft) V - Very High (972 lm/ft) TL - Tailored: _____ lm/ft*	H - High (670 lm/ft) V - Very High (862 lm/ft) TL - Tailored: _____ lm/ft*
* Specify lm/ft of outputs between High (H) and Very High (V). Consult factory for tailored lumen output outside of this range.						

## OUTPUT and LED TYPE

## MECHANICAL/OPTICAL OPTIONS

LED CRI/CCT	Uplight Optics ID & I Only	Downlight Optics ID & D Only	Reflector System
832-SMIC - 80 CRI, 3200K Single Mode Indigo-Clean 837-SMIC - 80 CRI, 3700K Single Mode Indigo-Clean 843-SMIC - 80 CRI, 4300K Single Mode Indigo-Clean 832-SMIC - 80 CRI, 3200K Single Mode Indigo-Clean 837-SMIC - 80 CRI, 3700K Single Mode Indigo-Clean 843-SMIC - 80 CRI, 4300K Single Mode Indigo-Clean	TG - Top Glow (standard) F - Flush ASY-L - Asymmetric Left Optic ASY-R - Asymmetric Right Optic ASYTG-L - Asymmetric Left Optic with Top Glow ASYTG-R - Asymmetric Right Optic with Top Glow	F - Flush (standard) BG - Bottom Glow DL - 1" Drop Down Lens RG-D - Flat Diffuser with 1" Regress RG-WCB - White Cross Blade Baffle RG-LHE - Hollowed Ellipse Louver RG-LHC - Hex Louver DAO-L - Downlight Asymmetric Optic Left <sup>2</sup> DAO-R - Downlight Asymmetric Optic Right <sup>2</sup>	96LG - 96 Low Gloss White

## ELECTRICAL OPTIONS

## MOUNTING OPTIONS

Voltage	Circuiting <sup>3</sup>	Driver Selection	Mounting Method
120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage (OTi only)	SC - Single Circuit* One single circuit in a run  DC - Dual Circuit* <sup>4</sup> Independent control of up and down separately in an I/D style fixture  MC - Multi-Circuit* More than one switch leg or zone. Factory shop drawings required  * Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)	<b>0-10V Driver Options</b> FC-10% - 0-10V 10% (standard) FC-1% - 0-10V 1% OTi-10% - EldoLED OTi, 0-10V 10% <sup>5</sup> OTi-1% - EldoLED OTi, 0-10V 1% <sup>5</sup> ELD-10V-0% - EldoLED SOLOdrive, 0-10V 0.1%  <b>DALI Driver Options</b> FC-DALI-1% - DALI 1% DXL-DALI-1% - EldoLED Dexal, 1% ELD-DALI-0% - EldoLED SOLOdrive, 0.1%  <b>DMX Driver Options</b> ELD-DMX - EldoLED POWERdrive, 0.1%  <b>Lutron Driver Options</b> LUT-ES1 - Lutron, Ecosystem 1% <sup>6</sup>  See Page 3 for additional driver options and details	MB - Mounting Bracket

## OTHER OPTIONS

Endcap Style	Emergency Style (Optional) See page 5 Backup Battery table	Integrated Sensor (Optional) <sup>9</sup>	Special Options (Optional)
FE - Flat Endcap (standard) DE - 1" Drop Endcap <sup>6</sup> OE - Open Endcap <sup>7</sup>	LGD18W - Legrand 18W Brand Battery Back-up LGD10W - Legrand 10W Brand Battery Back-up EM/GEN - Emergency to Generator NL - Night Light BSL722 - Bodine Battery Back up BSL310LP - Bodine Battery Back up Low Profile BSL10T3 - Bodine Battery Back up Low Profile Compact GTD - Generator Transfer Device ALCR - Automatic Load Control Relay	OBO - Occupancy OBD - Daylight W601 - Wattstopper Sensor <sup>10</sup> OBE - Enlighted Sensor <sup>11</sup> REE - Remote Enlighted <sup>12</sup> CLM-99 - Encelium RF SLM-99 - Encelium Sensor	AOCC-W - Lutron Athena Sensor <sup>13</sup> (Device Color White) AOCC-B - Lutron Athena Sensor <sup>13</sup> (Device Color Black) ARF-W - Lutron Athena RF <sup>13</sup> (Device Color White) ARF-B - Lutron Athena RF <sup>13</sup> (Device Color Black) VOCC - Lutron Vive Sensor <sup>14</sup> VRF - Lutron Vive RF <sup>14</sup>
<b>Finish</b>  SW - Signal White (standard) FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code <sup>8</sup>			CP - Chicago Plenum RLA - Red List Approved RLD - Red List Declared

<sup>1</sup> Regressed only

<sup>2</sup> Not available with Regressed

<sup>3</sup> Contact factory for switching options

<sup>4</sup> Indirect/Direct only

<sup>5</sup> Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO).

<sup>6</sup> Not available for Dual-Mode.

<sup>7</sup> 1" Drop Down Lens downlight only

<sup>8</sup> Available with Hollowed Ellipse Louver (LHE) only

<sup>9</sup> 20 business days lead time for color

<sup>10</sup> Integrated Sensor not available for Dual-Mode

<sup>11</sup> 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.

<sup>12</sup> Enlighted components installed by Finelite, provided by others

<sup>13</sup> 0-10V Drivers - AOCC up to 10 drivers may be connected; ARF up to 40 driver may be connected. DALI Drivers - AOCC & ARF up to 4 drivers can be connected

<sup>14</sup> Lutron Vive Integrated Sensors require a DALI driver. Contact Factory for Indirect Distribution.

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

## SUPPLEMENTARY DRIVER PAGE

### 0-10V Driver Options

<b>FC-10%</b>	Factory Choice, 0-10V 10% Dimming (Linear)
<b>FC-10%-DTO</b>	Factory Choice, 0-10V 10% Dimming, Dim-to-Off (Linear)
<b>FC-1%</b>	Factory Choice, 0-10V 1% Dimming (Linear)
<b>FC-1%-DTO</b>	Factory Choice, 0-10V 1% Dimming, Dim-to-Off (Linear)
<b>ELD-10V-0%</b>	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
<b>ELD-10V-1%</b>	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
<b>OTi-10%</b>	EldoLED OTi, 0-10V 10% Dimming (Linear)
<b>OTi-10%-DTO</b>	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
<b>OTi-1%</b>	EldoLED OTi, 0-10V 1% Dimming (Linear)
<b>OTi-1%-DTO</b>	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

### DALI Driver Options

<b>FC-DALI-1%</b>	Factory Choice, DALI 1% Dimming (Logarithmic)
<b>ODXL-DALI-1%</b>	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
<b>ELD-DALI-0%</b>	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
<b>ELD-DALI-1%</b>	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)

### DMX Driver Options

<b>ELD-DMX</b>	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
<b>ELD-DMX-16</b>	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)

### Lutron Driver Options

<b>LUT-ES1</b>	Lutron, Ecosystem 1% Dimming
----------------	------------------------------

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

## SPECIFICATIONS

### BODY TYPE

**CONSTRUCTION:** Precision-cut 6063-T6 extruded aluminum body. Internal joiner system, plug-together wiring, standard.

**LENGTHS:** Any length, 2' minimum, in increments down to 1/16" ( $\pm 1/32"$ ). 12' maximum section length. Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**), and White Cross Blade Baffle (**WCB**) are available in 1' increments.

**MITERED CORNERS:** Illuminated corners of greater than 60° and less than 180° in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, 1" Drop Down Lens, Regressed Diffuser, White Cross Blade Baffle<sup>1</sup>, Hollowed Ellipse Louver (**LHE**) or Hex Louver (**LHC**). Contact factory for Double miters using the White Cross Blade Baffle. Consult factory for tailored lighting options.

### OUTPUT AND LED TYPE

**LIGHT OUTPUT:** Two lumen packages available, High (**H**), and Very High (**V**). For lengths 3' and greater, the uplight and downlight can be specified with different lumen packages and dual controls. For Tailored Outputs outside of range from Standard (**S**) to Very High (**V**), consult factory. Light engines are replaceable.

**INDIGO-CLEAN TECHNOLOGY:** Indigo-Clean Technology utilizes a combination of blended white LEDs, and safe 405nm LEDs to continually disinfect a space and kill bacteria, Influenza-A<sup>2</sup>, and SARS-CoV-2 – the virus that causes COVID-19<sup>2</sup>. Unlike UV disinfection, Indigo-Clean Technology is designed to safely and continuously disinfect a space while it is fully occupied. When the Indigo-Clean Technology light is on, disinfection is active. For optimum performance, continuously provide an average of 50-60 footcandles on the work plane and high touch surfaces (24/7). Dimming generally reduces effectiveness and increases the variation in the disinfecting light's visual appearance.

**Dual-Mode Indigo-Clean Technology Controller:** It is a low-voltage internal device that determines the operational mode based on the input received from the external automated controls. An Off manual push will not turn the lights off, but rather turn the lights to Blue Mode. Please refer to Dual-Mode Application Guide for wiring diagram. Dim to Off not available.

### MECHANICAL/OPTICAL OPTIONS

**UPLIGHT OPTION<sup>3</sup>:** 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; **ASY-L** distributes light to the left, **ASY-R** distributed light to the right of the luminaire. Consult factory for more tailored lumen outputs.

**DOWNLIGHT OPTION<sup>4</sup>:** 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Available with Flush (**F**), Bottom Glow (**BG**), 1" Drop Down Lens (**DL**), White Cross Blade Baffle (**WCB**)<sup>5</sup>, Hollowed Ellipse Louver (**LHE**)<sup>5</sup>, Hex Louver (**LHC**)<sup>5</sup>, Downlight Asymmetric Optic (**DAO**)<sup>6</sup>, and Regressed downlight diffusers (**RG**). 1" Drop Down Lens made of highly efficient acrylic. Available with a solid endcap or an endcap with a diffuse filler to continue the luminous aesthetic. Downlight Asymmetric Optic is an extruded lenses with a subtle ribbed appearance providing asymmetric distribution for improved optical performance. Consult factory for more tailored lumen outputs.

**LUMEN MAINTENANCE:** White LEDs: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours. 405nm LEDs: 70% of initial output at L70 @ 60,000 hours.

**REFLECTORS: Wall Mount:** Die-formed 20-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint.

### ELECTRICAL FEATURES

**STATIC WHITE FEED:** Standard with one 18-gauge/5-conductor single-circuit feed controlling uplight and downlight together (power and dimming). Specify dual feeds for independent control of uplight and downlight. 14- gauge feed used when luminaire current exceeds 5 amps.

**Single-Mode Indigo-Clean Technology:** Continuous environmental disinfection system that uses a blended white LEDs and 405nm Indigo-Clean LEDs. The narrow spectrum light provides a safe visible light that disinfects the space. When the light is on, disinfection is active.

**Dual-Mode Indigo-Clean Technology:** Utilizes a two circuit board design. When the space is occupied it utilizes a combination of blended white LEDs and 405nm LEDs. When the space is unoccupied, it utilizes just the 405nm LEDs with increased output to increase disinfection efficacy.

<sup>1</sup> White Cross Blade (WCB) baffles not available with custom angles. Available in 90 degrees only

<sup>2</sup> [Indigo-Clean Research Reports](#)

<sup>3</sup> Wall Mount Indirect/Direct, Wall Mount Regressed Indirect/Direct, and Wall Mount Indirect only

<sup>4</sup> Wall Mount Indirect/Direct, Wall Mount Regressed Indirect/Direct, Wall Mount Direct, and Wall Mount Regressed Direct only

<sup>5</sup> Wall Mount Regressed Indirect/Direct & Wall Mount Regressed Direct only

<sup>6</sup> Not available with Regressed

Continued

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

## SPECIFICATIONS

**STATIC WHITE 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% standard. Dimming to 1% available. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

- **Power Factor:** ≥ 0.9
- **Total Harmonic Distortion (THD):** <20%
- **Expected driver lifetime:** 100,000 hours

### LUTRON DRIVER OPTIONS:

**LUT-ES1** - Hi-lume 1% EcoSystem with Soft-On, Fade-to- Black dimming (LDE1 series).

## MOUNTING OPTIONS

**HANGING HARDWARE: Wall Mount:** Luminaire hangs securely from mounting brackets fastened directly to the wall for easy installation. Luminaire stands 1/2" off the wall. The mounting bracket is concealed behind the luminaire.

## OTHER OPTIONS

**ENDCAPS:** Flat diecast aluminum endcaps (**FE**) add 1/4" to each end of luminaire. 1" Drop Down Lens Endcap (**DE**)<sup>\*</sup> includes diffuse element to continue luminance of drop lens. Open Endcap (**OE**) is for use with the Hollowed Ellipse Louver (**LHE**); following the curve of the louver.

**EMERGENCY STYLE:** Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery.

### Backup Battery

	Legrand 18W	Legrand 10W /Bodine BSL310LP
<b>HP4-WM-D</b>		
Min. Housing Length	8'*	4'
EM Lumen Output	1724	1026
EM Section Illum.	2'	2' or 4'
<b>HP4-WM-WW-D</b>		
Min. Housing Length	8'*	4'*
EM Lumen Output	1724	1026
EM Section Illum.	4'	4'
<b>HP4-WM-I</b>		
Min. Housing Length	8'	4'
EM Lumen Output	2057	1222
EM Section Illum.	2'	2' or 4'

Based on 3700K and 80-CRI.

\* Minimum fixture housing length for battery pack approved without sensor

The lumens are based on 835. For other CCT/CRI, refer to the Lumen Adjustment Factor table on page 9.

<sup>7</sup> Available in Indirect/Direct Regressed & Direct Regressed only

<sup>8</sup> 20 business days lead time for color

<sup>9</sup> Excludes Battery Back up and Generator Transfer Device weight

Bodine GTD and Legrand ALCR Min. Length	
Configuration	Min Length
Generator	D-2'; I-2'; ID-3'
Generator + OCC	D-2'; I-2'; ID-3'
Day	D-2'; I-2'; ID-3'
Generator + Day	D-2'; I-2'; ID-3'

**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. The default location for the Connected Lighting Module (**CLM**) will be on the topside of the fixture for all mounting types except for Surface Mount (**SM**). In SM fixtures the CLM will be located on the direct side of fixture housed in a bracket that is flush with the direct lens.

**PATENT:** Indigo-Clean products and technology covered by U.S. Patent No.US 9,039,966 and US 8,398,264. Product may also be covered by patents found at [www.kenall.com/patents](http://www.kenall.com/patents).

**FINISHES:** Finelite Signal White (**SW**) powder coat, Finelite Black (RAL 9005) with semi gloss fine texture (**FB**), and Satin Aluminum (**SA**) are standard. Optional Adder: 179 RAL colors<sup>7</sup> are available.

**LABELS:** Luminaire and electrical components are ETL-listed 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. UL 924 and UL 2108 - PoE options available on request. EPA Est.No. 99530-CA-2. These fixtures are rated for Damp Location. Chicago Plenum options available for C1, C2, or C3 suspension using our GridBox. 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 2015/863. Consult factory for tailored lighting options. Finelite makes the specification process easy when putting healthier products on your projects. Simply add – **RLA** (Red List Approved) or – **RLD** (Red List Declared) to your part number.

**WEIGHT<sup>8</sup>:** ID - 3.4 lb/ft; D - 2.8 lb/ft; I - 2.8 lb/ft; (luminaire only)

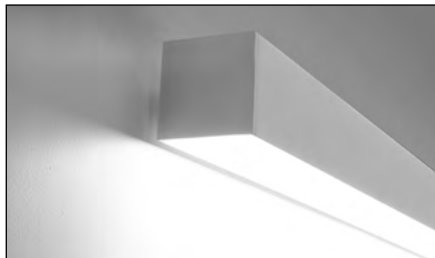
**DLC QUALIFIED:** Contact factory

**WARRANTY:** 5-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

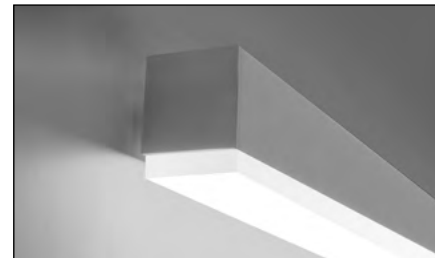
## AESTHETIC OPTIONS



Flush Diffuser (**F**)



Bottom Glow Diffuser (**BG**)



1" Drop Down Lens (**DL**)



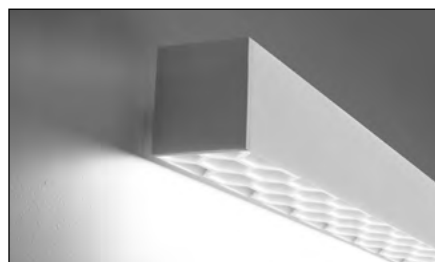
Flat Diffuser with 1" Regressed (**RG-D**)



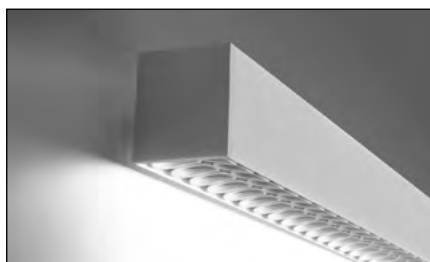
Downlight Asymmetric Optic¹ (**DAO**)



White Cross Blade Baffle² (**RG-WCB**)



Hex Louver² (**RG-LHC**)



Hollowed Ellipse Louver² (**RG-LHE**)

¹ With a subtle ribbed appearance providing an asymmetric distribution

² Not available with Wall Wash

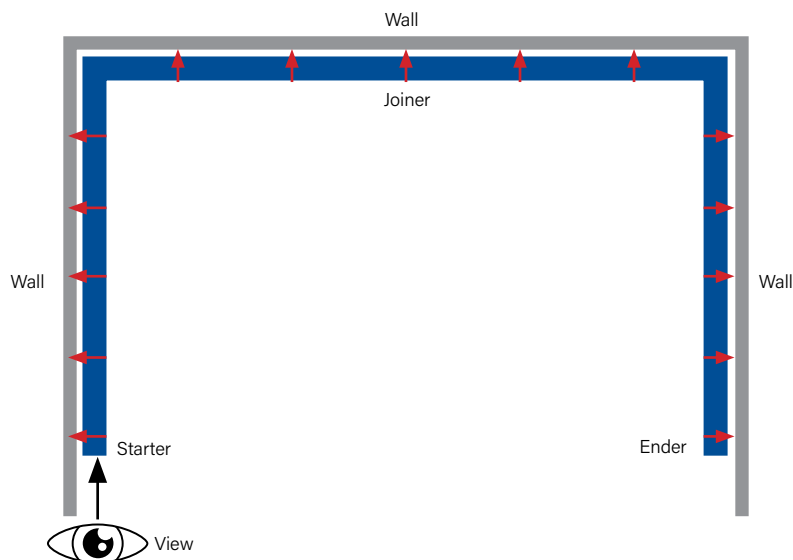
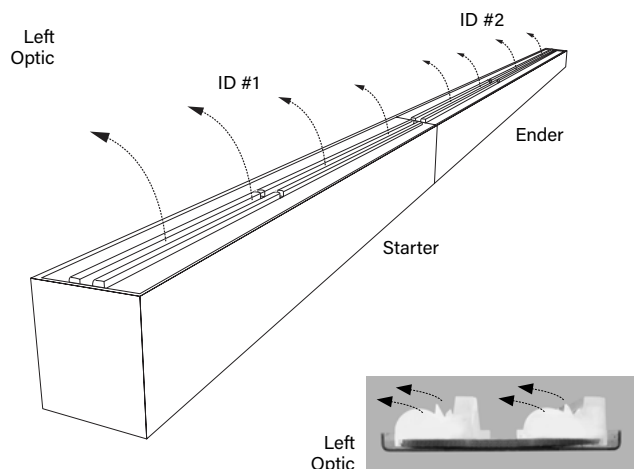
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

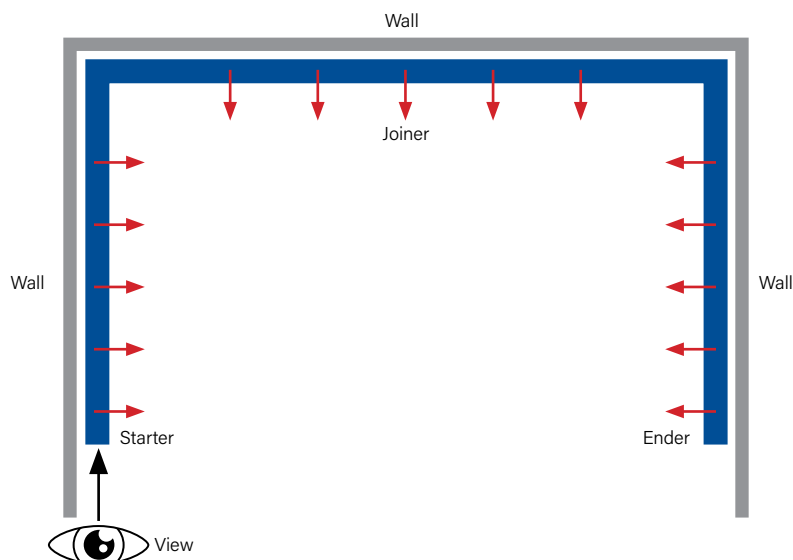
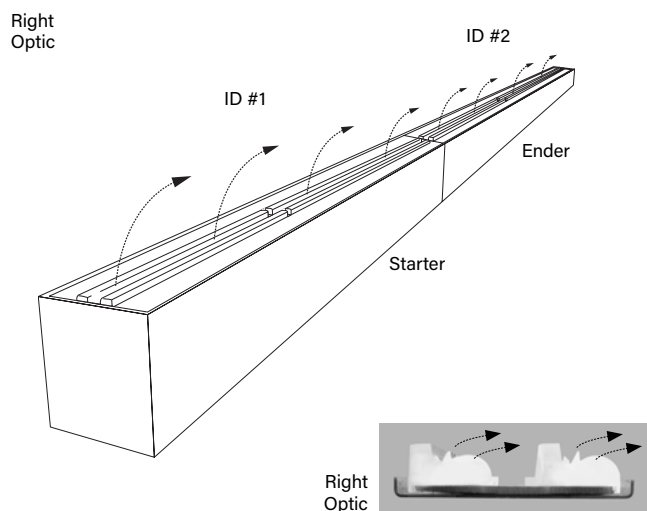
## ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying ASY-L distributes light to the left or ASY-R distributes light to the right. For proper orientation: view luminaire from starter end when specifying the direction of the Asymmetric optic.

### Asymmetric Left Optic (ASY-L)



### Asymmetric Right Optic (ASY-R)





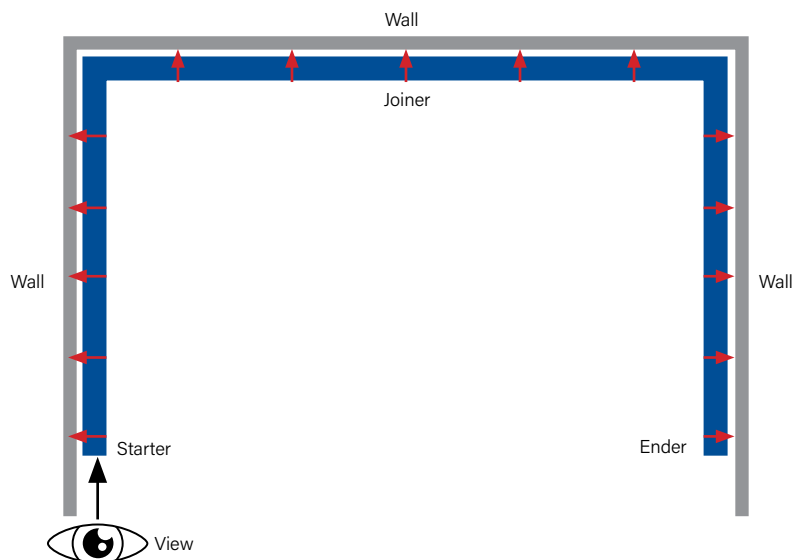
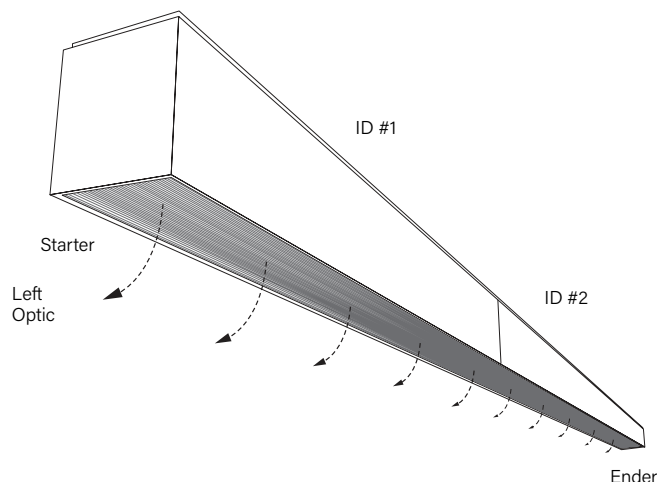
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

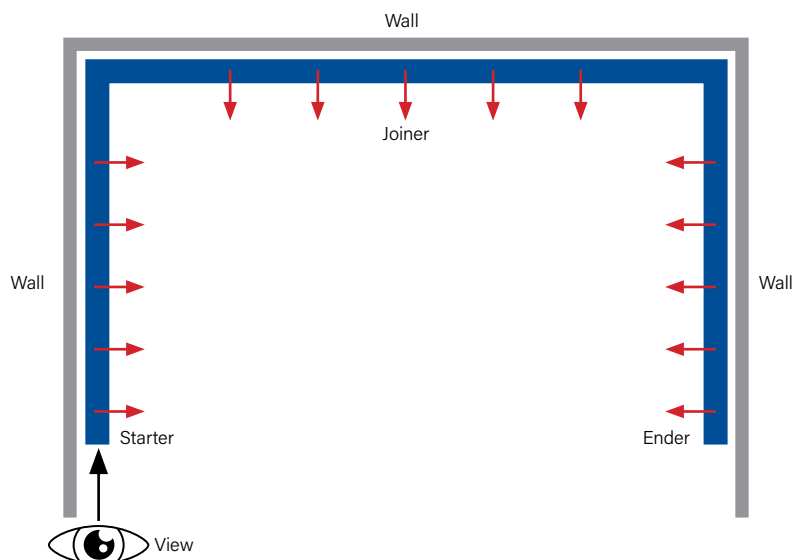
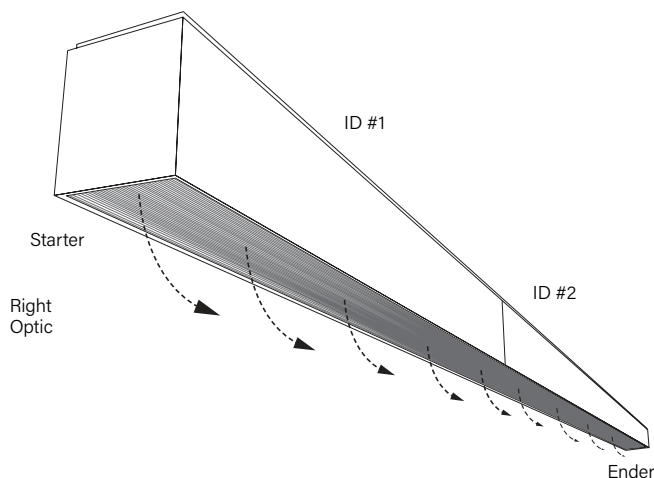
## DOWNLIGHT ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying DAO-L distributes light to the left or DAO-R distributes light to the right. For proper orientation: view luminaire from starter end when specifying the direction of the Downlight Asymmetric optic.

### Downlight Asymmetric Optic Left (DAO-L)



### Downlight Asymmetric Optic Right (DAO-R)



## PREINSTALLED LABEL



For DAO, Preinstalled label on diffuser shows direction of light. Remove after installation.



Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

## Indirect/Direct Photometry - 4' Luminaire 3700K

HP4-P-ID-4'-V-V-837-WSO-DSO

**Uplight:** Widespread Optic

**Downlight:** Downlight Spread Optic

**Distribution:** 53% Up (V) / 47% Down (V)

**Efficacy:** 106 lm/W

**Uplight:** 3112 lumens (778 lumens/foot)

**Downlight:** 3500 lumens (875 lumens/foot)

**Total luminaire output:** 7501 lumens (1875 lm/ft)

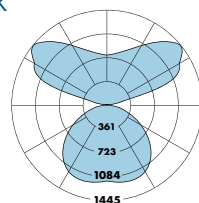
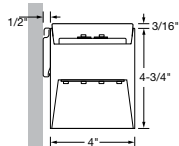
62.3 watts (15.6 W/ft)

**Peak Candela Value:** 1218 @ 125°

CRI: 80 / CCT: 3700K

ITL LM79 Report 89033 and 92993

(Family Correlated)



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	1005	1005	1005	1005	1005	
5	998	1000	1005	1009	1011	111
15	955	968	999	1035	1044	326
25	847	878	963	1027	1046	508
35	713	764	882	960	969	622
45	569	627	748	806	816	641
55	425	475	577	615	618	566
65	286	321	388	409	408	420
75	158	175	207	214	212	239
85	47	49	55	53	53	68
90	0	0	0	0	0	90
95	36	64	66	52	52	90
105	170	218	494	474	380	451
115	310	349	630	975	1064	747
125	405	454	712	1115	1218	792
135	473	528	736	1041	1176	699
145	537	582	734	915	993	544
155	593	620	709	798	834	381
165	635	645	680	711	723	223
175	656	657	660	664	666	73
180	659	659	659	659	659	

Information in chart below is for reference and based on ITL LM79 report 89456 and 94139 (Family Correlated)

### Total Light Output, 3700K, 80 CRI (Lumens) - 4' Luminaire

	↑H ↑	↑V
↑H ↑	5834 [153%   47%↓]	6723 [160%   40%↓]
↑V	6612 [147%   53%↓]	7501 [153%   47%↓]

### Light Output, 3700K, 80 CRI (Lumens Per Foot)

	↑H ↑	↑V
↑H ↑	1459	1681
↑V	1653	1875

### Single Mode Power, 3700K (Watts Per Foot)

	↑H ↑	↑V
↑H ↑	13.5	15.6
↑V	15.6	17.6

### Dual Mode Power, 3700K (Watts Per Foot)

Status	Occupied	LPD	Unoccupied	Occupied	LPD	Unoccupied
↑H ↑	13.8	10.8	8.2	15.9	12.5	9.4
↑V	15.9	12.5	9.4	18.0	14.1	10.5

### Efficacy, 3700K, 80 CRI (Lumens Per Watt)

	↑H ↑	↑V
↑H ↑	108	108
↑V	106	106

↑ Family Correlation based on 4' luminaire 3700K Very High Output (V) test - 120V.

H - High Output, V - Very High Output

## Indirect/Direct Photometry - 4' Luminaire 3700K

HP4-P-ID-V-V-837-F-F

**Uplight:** Flush Diffuser

**Downlight:** Flush Diffuser

**Distribution:** 53% Up (V) / 47% Down (V)

**Efficacy:** 104 lm/W

**Uplight:** 3887 lumens (971 lumens/foot)

**Downlight:** 3447 lumens (862 lumens/foot)

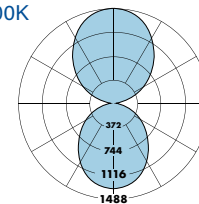
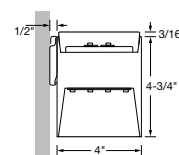
**Total luminaire output:** 7334 lumens (1834 lm/ft)

70.5 watts (17.6 W/ft)

**Peak Candela Value:** 1488 @ 180°

CRI: 80 / CCT: 3700K

ITL LM79 Report 85132 (Family Correlated)



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	1342	1342	1342	1342	1342	
5	1333	1334	1334	1333	1334	126
15	1272	1265	1269	1268	1261	357
25	1152	1139	1142	1138	1131	525
35	988	977	976	967	962	609
45	799	791	788	779	774	606
55	602	595	592	584	580	528
65	405	400	399	394	393	394
75	217	218	217	217	216	231
85	60	62	63	64	65	71
90	0	0	0	0	0	90
95	66	67	71	75	76	80
105	239	243	247	251	250	261
115	451	449	451	456	452	448
125	672	675	675	670	667	601
135	896	891	894	891	884	673
145	1106	1095	1102	1097	1090	688
155	1281	1271	1278	1272	1268	587
165	1411	1404	1408	1405	1404	396
175	1479	1479	1479	1478	1479	140
180	1488	1488	1488	1488	1488	

Information in chart below is for reference and based on ITL LM79 report 85132

### Total Light Output, 3700K, 80 CRI (Lumens) - 4' Luminaire

	↑H ↑	↑V
↑H ↑	5704 (153%   47%↓)	6568 (159%   41%↓)
↑V	6470 (147%   53%↓)	7334 (153%   47%↓)

### Light Output, 3700K, 80 CRI (Lumens Per Foot)

	↑H ↑	↑V
↑H ↑	1426	1642
↑V	1618	1834

### Single Mode Power, 3700K (Watts Per Foot)

	↑H ↑	↑V
↑H ↑	13.5	15.6
↑V	15.6	17.6

### Dual Mode Power, 3700K (Watts Per Foot)

Status	Occupied	LPD	Unoccupied	Occupied	LPD	Unoccupied
↑H ↑	13.8	10.8	8.2	15.9	12.5	9.4
↑V	15.9	12.5	9.4	18.0	14.1	10.5

### Efficacy, 3700K, 80 CRI (Lumens Per Watt)

	↑H ↑	↑V
↑H ↑	106	105
↑V	104	104

↑ Family Correlation based on 4' luminaire 3700K Very High Output (V) test - 120V.

H - High Output, V - Very High Output

**Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.**

- Use **Occupied Power** for total electrical load calculations. Use this value to estimate branch circuit lighting loads.
- Use **LPD Power** for lighting power density calculations. Only the power attributed to white light is required per NEMA LSD EB 84-202X. Power used toward germicidal disinfection has been removed for this calculation.
- Use **Unoccupied** and **Occupied Power** for energy calculations to determine the power consumed over time based on the use of the space.

## Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI	
Indigo-Clean	
3200K	0.98
3700K	1.00
4300K	1.03

FLUSH: High Output (H) / Very High Output (V), 3200K, 80 CRI  
**Lumen Adjustment Factor:** 0.98

**Total Light Output:** 6470 lm x 0.98 = 5176 lm

**Total Light Output per Foot:** 1426 lm/ft x 0.98 = 1397 lm/ft.  
**watts/foot:** 15.6 W/ft.

$$\text{Efficacy} = \frac{1397 \frac{\text{lm}}{\text{ft}}}{15.6 \frac{\text{W}}{\text{ft}}} = 90 \text{ lm/W}$$

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# High Performance 4" Aperture (HP-4) - Wall Mount

Direct Photometry - 4' Luminaire 3700K

HP4-P-D-V-837-F

Downlight: Flush Diffuser

Efficacy: 98 lm/W

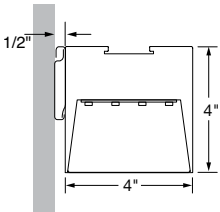
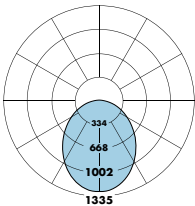
Total luminaire output: 3446 lumens (862 lm/ft)

35.2 watts (8.8 W/ft)

Peak Candela Value: 1242 @ 0°

CRI: 80 / CCT: 3700K

TL LM79 Report 85124 (Family Correlated)



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	1242	1242	1242	1242	1242	
5	1235	1235	1234	1234	1234	126
15	1179	1170	1175	1174	1168	355
25	1069	1056	1060	1054	1048	523
35	917	906	906	897	891	607
45	743	734	733	723	719	606
55	560	553	551	543	539	529
65	375	374	373	368	367	395
75	204	204	205	203	204	233
85	58	59	60	61	60	71
90	0	0	0	0	0	

Information in chart below is for reference and based on ITL LM79 report 94139 (Family Correlated)

Total Light Output, 3700K, 80 CRI (Lumens) - 4' Luminaire

H <sup>1</sup>	V
2680	3446

Light Output, 3700K, 80 CRI (Lumens Per Foot)

H <sup>1</sup>	V
670	862

Single Mode Power, 3700K (Watts Per Foot)

H <sup>1</sup>	V
6.8	8.8

Dual Mode Power, 3700K (Watts Per Foot)

H <sup>1</sup>			V		
Occupied	LPD	Unoccupied	Occupied	LPD	Unoccupied
6.9	5.4	4.1	9.0	7.0	5.2

Efficacy, 3700K, 80 CRI (Lumens Per Watt)

H <sup>1</sup>	V
99	98

<sup>1</sup> Family Correlation based on 4' luminaire 3700K Very High Output (V) test - 120V.

H - High Output, V - Very High Output

Wattage is Real Power. If you would like additional details to calculate Apparent Power, please contact your local Finelite representative.

- Use **Occupied Power** for total electrical load calculations. Use this value to estimate branch circuit lighting loads.
- Use **LPD Power** for lighting power density calculations. Only the power attributed to white light is required per NEMA LSD EB 84-202X. Power used toward germicidal disinfection has been removed for this calculation.
- Use **Unoccupied** and **Occupied Power** for energy calculations to determine the power consumed over time based on the use of the space.

## Sample Lumen Adjustment Calculation

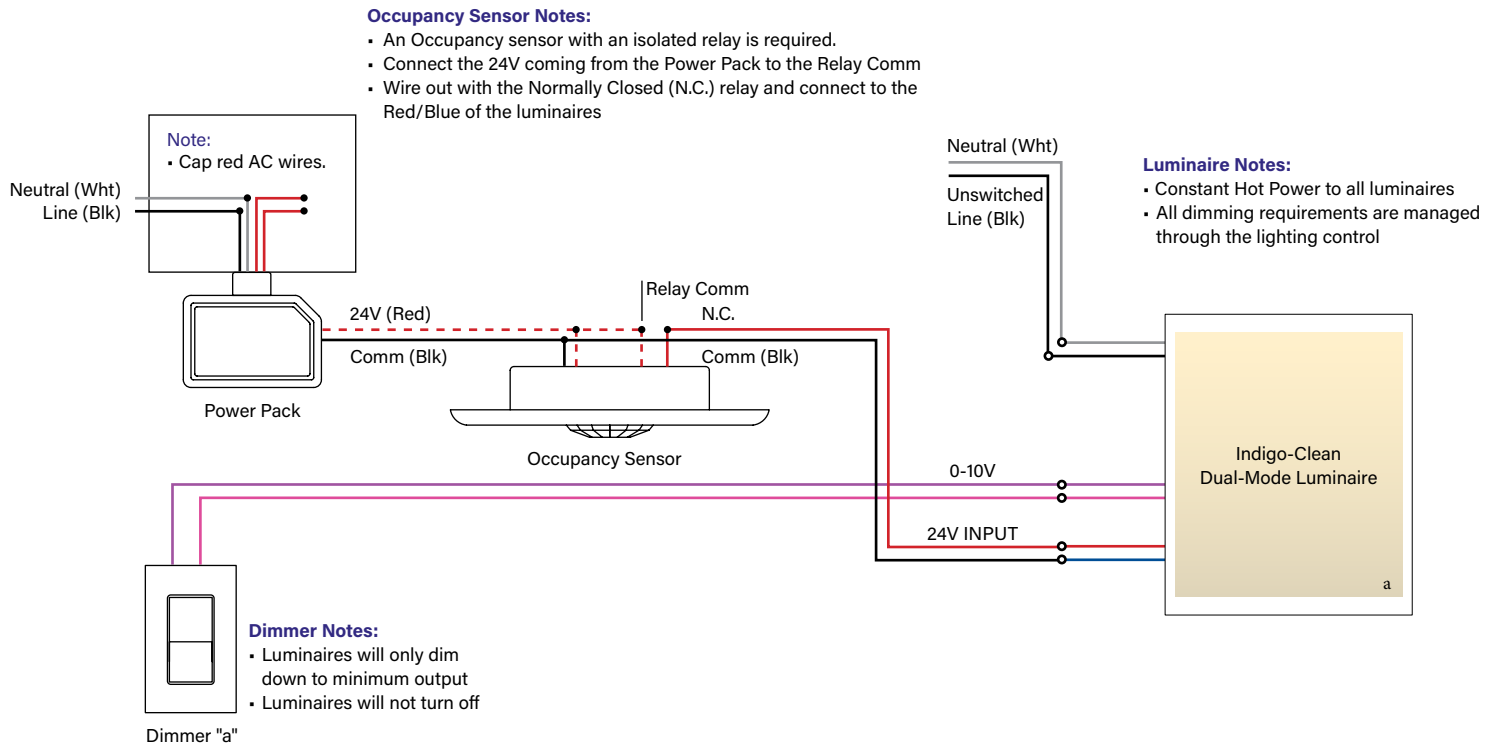
Lumen Adjustment Factors 80 CRI	
Indigo-Clean	
3200K	0.98
3700K	1.00
4300K	1.03

FLUSH: Very High Output (V), 3200K, 80 CRI  
**Lumen Adjustment Factor: 0.98**  
**Total Light Output:** 3446 lm x 0.98 = 3377 lm  
**Total Light Output per Foot:** 862 lm/ft x 0.98 = 845 lm/ft.  
**watts/foot:** 8.8 W/ft.  
**Efficacy** =  $\frac{845 \frac{\text{lm}}{\text{ft}}}{8.8 \frac{\text{W}}{\text{ft}}}$  = 96 lm/W

Submitted by:		Date:
Type:	Project:	
Ordering Info:		

# Indigo Clean Dual Mode - Basic Wiring Diagram

## WIRING DIAGRAM



## DUAL FEED DETAIL

