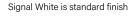
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Туре:	Project:		
Ordering Info:		Better Lighting	







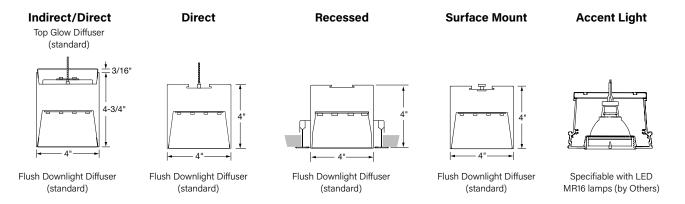
Indigo-Clean Technology is a Continuous Environmental Disinfection System that emits a narrow spectrum light that kills bacteria, Influenza-A1, and SARS-CoV-2 - the virus that causes COVID-191 - and is proven effective by recently conducted independent lab testing. Unlike UV disinfection, Indigo-Clean 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 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

#### **CROSS SECTIONS**



Note: see page 6 for all aesthetic options

#### **LUMEN OUTPUT PACKAGES**









Very High





Kenall Manufacturing Co., a Legrand Company

Submitted by:		Date:	FINFI ITF
Type:	Project:		
Ordering Info:		Better Lighting	

**BODY TYPE OUTPUT and LED TYPE** 

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Run Length of Configuration	Uplight Output ID & I Only¹(Flush)	Downlight Output ID & D Only¹(Flush)
HP - High Performance	4	P - Pendant R - Recessed SM - Surface Mount	D - Direct ID - Indirect/Direct	Minimum 2' increments accurate to 1/16" (±1/32"), standard. 12-foot maximum section length.	H - High (756 lm/ft) V - Very High (972 lm/ft) TL - Tailored:lm/ft*  * Specify lm/ft of outputs between Hickney Consult factory for tailored lumen outputs	

#### **OUTPUT and LED TYPE**

#### MECHANICAL/OPTICAL OPTIONS

**ELECTRICAL OPTIONS** 

LED CRI/CCT	Uplight Optics ID Only	Downlight Optics ID & D Only	Reflector System	Voltage
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-DMIC - 80 CRI, 3200K Dual Mode Indigo-Clean 837-DMIC - 80 CRI, 3700K Dual Mode Indigo-Clean 843-DMIC - 80 CRI, 4300K Dual Mode Indigo-Clean	TG - Top Glow (standard) F - Flush WSO - Widespread Optic WSOTG - Widespread Optic with Top Glow ASY-L - Asymmetric Left Optic ASY-R - Asymmetric Right Optic with Top Glow ASYTG-L - Asymmetric Right Optic with Top Glow ASYTG-R - Asymmetric Right Optic with Top Glow	<b>F</b> - Flush (standard)	96 - 96 Low Gloss White	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage <sup>2</sup>

#### **ELECTRICAL OPTIONS**

#### MOUNTING OPTIONS

Circuiting <sup>3</sup>	Driver Se	lection	Mounting Method	Ceiling Hardware Type
SC - Single Circuit* One single circuit in a run  DC - Dual Circuit* Independent control of up and down separately in an I/D style fixture  MC - Multi-Circuit* More than one switch leg or zone	0-10V Driver Options FC-10% - 0-10V 10% (standard) FC-1% - 0-10V 1% OTi-10% - EldoLED OTi, 0-10V 10% 4 OTi-1% - EldoLED OTi, 0-10V 1% 4 ELD-10V-0% - EldoLED SOLOdrive, 0-10V	DMX Driver Options ELD-DMX - EldoLED POWERdrive, 0.1%  Lutron Driver Options LUT-ES1 - Lutron, Ecosystem 1%	FA50 - Fully Adjustable 50' FA100 - Fully Adjustable 100' FA150 - Fully Adjustable 150' FA200 - Fully Adjustable 200' FA250 - Fully Adjustable 250' FA300 - Fully Adjustable 300'	C1 - 15/16" T-Bar C2 - 9/16" T-Bar C3 - Screw Slot C4 - Hard Ceiling 6 C1T - 15/16" Tegular C2T - 9/16" Tegular
More than one switch leg or zone (not 'DC' independent control of up and down separately for an I/D style fixture). Factory shop drawings required	0.1%  DALI Driver Options		FM - Flexible Mounting <sup>5</sup>	C3F - Flush Screw Slot SF - Spackle Flange VF - Visible Flange
* Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)	FC-DALI-1% - DALI 1%  DXL-DALI-1% - EIdoLED Dexal, 1%  ELD-DALI-0% - EIdoLED SOLOdrive, 0.1%	See Page 3 for additional driver options and details		TZ6 - Tech Zone 6" (C1, C2, C2T, C3, C3F) See page 8 for flange information

#### OTHER OPTIONS

Endcap Style	Finish	Emergency Style (Optional) See page 5 Backup Battery table	Accent Light Source <sup>9</sup>	Accent Light Quantity 10	Accent Downlight Diffuser <sup>10</sup>
FE - Flat Endcap (standard) DE - 1" Drop Endcap 7	SW - Signal White FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code 8	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 GTD - Generator Transfer Device	MR16 - MR16 (GU 5.3)  NOTE: See page 9 for Accent Light info	QTY	SI - Section between accents is illuminated NB - Section between accents is non-illuminated
		ALCR - Automatic Load Control Relay  See Backup Battery table on page 5 for fitment limitations			

#### **OTHER OPTIONS**

Integrated Sensor (Optional) <sup>10</sup>		Special Options (Optional)
OBO - Occupancy OBD - Daylight W601 - Wattstopper Sensor <sup>11</sup> OBE - Enlighted Sensor <sup>12</sup> REE - Remote Enlighted <sup>13</sup> CLM - Encelium Sensor RE7 - nLight Air Sensor	AOCC-W - Lutron Athena Sensor (Device Color White) 14 AOCC-B - Lutron Athena Sensor (Device Color Black) 14 ARF-W - Lutron Athena RF (Device Color White) 14 ARF-B - Lutron Athena RF (Device Color Black) 14 VOCC - Lutron Vive Sensor 15 VRF - Lutron Vive RF 15	CP - Chicago Plenum <sup>16</sup> RLA - Red List Approved RLD - Red List Declared

- <sup>1</sup>Consult factory for tailored lumen output <sup>2</sup>Not available for Accent Light <sup>3</sup>Consultation for switching options <sup>3</sup>Condact factory for switching options <sup>4</sup>Condact factory for the consultation of functionality (FC-19% DTO, FC-19% DTO). Not available with Dual-Mode. <sup>5</sup>Direct only

- <sup>®</sup> Surface Mount only <sup>↑</sup> " Drop Down Lens downlight only <sup>®</sup> 20 business days lead time for color <sup>®</sup> Accent lighting only, Lamp by Others. See Page <sup>®</sup> for more details <sup>∞</sup> Integrated Sensor not available for Dual-Mode

- up to 40 driver may be connected DALI Drivers **AOCC & ARF** up to 4 drivers can be connected \*\*Lutron Vive Ingrated Sensors require a DALI driver \*\*Only available with Cl, C2, and C3 mounting hardware with Finelite Griddowth for Remote mounting sensor

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#### **SUPPLEMENTARY DRIVER PAGE**

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

	DALI Driver Options
FC-DALI-1%	Factory Choice, DALI 1% Dimming (Logarithmic)
DXL-DALI-1%	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
ELD-DALI-0%	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
ELD-DALI-1%	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)

	DMX Driver Options
ELD-DMX	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
ELD-DMX-16	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)

	Lutron Driver Options
LUT-ES1	Lutron, Ecosystem 1% Dimming

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	-11		

#### **SPECIFICATIONS**

#### **BODY TYPE**

**CONSTRUCTION:** Precision-cut 6061-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.

**MITERED CORNERS:** Illuminated 90° corners in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, and 1" Drop Down Lens. Contact factory for custom angles.

#### **OUTPUT AND LED TYPE**

**LIGHT OUTPUT:** Two lumen packages available, High (**H**), and Very High (**V**). For lengths 3 feet and greater, the uplight and downlight can be specified with different lumen packages and dual controls. For Tailored Outputs (**TL**), consult factory for range outside between High (**H**) to Very High (**V**). 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>4</sup>, and SARS-CoV-2 – the virus that causes COVID-19<sup>4</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.

**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.

**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 OPTION¹:** 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 options include: Flush frost white snap-in diffuser, 73% transmissive, 99% diffusion; Widespread Optic (**WSO**) and Widespread Optic with Top Glow (**WSOTG**); WSO enables increased

luminaire spacing with improved ceiling uniformity. Asymmetric optic directs light in a specific direction. (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:** 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**), and 1" Drop Down Lens (**DL**). 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. MR16, see page 9 for details or consult factory. For Tailored Outputs (**TL**), specify lm/ft2 of outputs beteen those of Boosted (**B**) and Very High (**V**). Consult factory for more tailored lumen outputs. Non-illuminated sections (**NB**) are filled with Standard Flush diffuser.

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

#### **ELECTRICAL OPTIONS**

**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.

**STATIC WHITE DRIVER:** Replaceable 120V, 277V, and 347V <sup>3</sup> constant current reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 100%-10% standard. Dimming to 1% available. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

- Power Factor:  $\geq 0.9$ 

- Total Harmonic Distortion (THD): <20%

- Expected driver lifetime: 100,000 hours

#### **LUTRON STATIC DRIVER OPTIONS:**

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

#### **MOUNTING OPTIONS**

**HANGING HARDWARE: Pendant:** 50" Fully Adjustable (**FA**) plated steel aircraft cable with safety stop hardware standard. Contact factory for additional lengths up to 150". The Flexible Mounting Bracket (**FM**) <sup>2</sup> adjusts the suspension points to accommodate existing architecture. Suspension points adjust up to 2' in from the end of 8' or 12' fixture lengths and up to 1' in on shorter lengths.

**Recessed:** Standard bracket design works with most lay-in ceiling types. Brackets secure luminaire to the ceiling grid from above. Tie-in T-Bar brackets connect the luminaire to the T-Bar for securing to structure. Consult local codes for tie-wire recommendations.

Continued

<sup>&</sup>lt;sup>1</sup> Indirect/Direct only <sup>2</sup> Direct only

<sup>&</sup>lt;sup>3</sup> Not available for Accent Lighting

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#### **SPECIFICATIONS**

**Surface Mount:** Lay-in ceiling types: caddy clip with 1/4" - 20 stud and nut. Drywall or concrete surfaces (walls or ceilings): 1/4" - 20 stud and nut (provided by others). Mounted with three equidistant suspension points.

#### **OTHER OPTIONS**

**ENDCAPS:** Flat diecast aluminum endcaps (**FE**) add 1/4" to each end of luminaire. 1" Drop Down Lens Endcap (**DE**) includes diffuse element to continue luminance of drop lens.

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

Backup Battery				
	Legrand 18W	Legrand 10W / Bodine BSL310LP		
HP4-P-D				
Min. Housing Length	8'*	4'		
EM Lumen Output	1724	1026		
EM Section Illum.	2'	2' or 4'		
HP4-P-ID				
Min. Housing Length	8'	4'		
EM Lumen Output	1724	1026		
EM Section Illum.	2'	2' or 4'		
HP4-R-D				
Min. Housing Length	8'	4'		
EM Lumen Output	1724	1026		
EM Section Illum.	4'	4'		
HP4-SM-D				
Min. Housing Length	8'	4'		
EM Lumen Output	1724	1026		
EM Section Illum.	4'	2' or 4'		

<sup>\*</sup> Minimum fixture housing length for battery pack approved without sensor Based on 3700K and 80 CRI.

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

**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 <a href="https://www.kenall.com/patents">www.kenall.com/patents</a>.

**FINISHES:** Finelite Signal White (**SW**) powder coat standard. Finelite Black 9005 with semi gloss fine texture (**FB**) and Satin Aluminum (**SA**) is available. Optional Adders: 179 RAL colors <sup>5</sup>.

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.

WEIGHT6: ID - 3.4 lb/ft; D & SM - 2.8 lb/ft

**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.

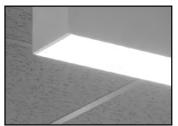
<sup>&</sup>lt;sup>4</sup> Consult Finelite for Generator Transfer Device and Battery Back up fit

<sup>&</sup>lt;sup>5</sup> 20 business days lead time for color

<sup>&</sup>lt;sup>6</sup> Excludes Battery Back up and Generator Transfer Device weight

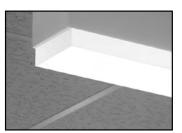
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Type:	Project:		111122112
Ordering Info:			Better Lighting
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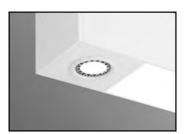
#### **AESTHETIC OPTIONS**



Flush Diffuser (F)







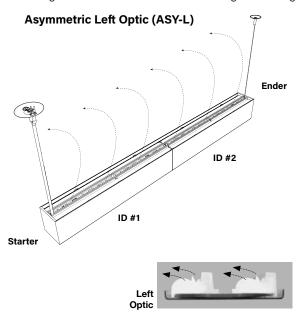
Bottom Glow Diffuser (BG)

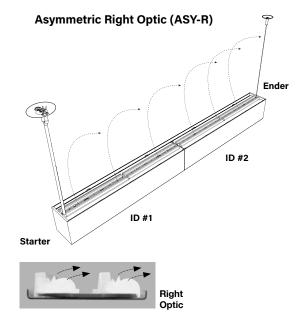
1" Drop Down Lens (DL)

Accent Light Housing 1 (MR16)

#### **ASYMMETRIC OPTIONS<sup>2</sup>**

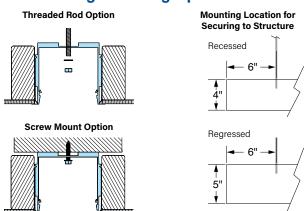
Use this tool to understand how to specify Asymmetric for your project. The diagrams below show a linear run from power feed to ender. Specify ASY-L distributes light to the left or ASY-R distributes light to the right.





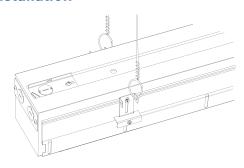
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#### **Hard Ceiling Mounting Options**



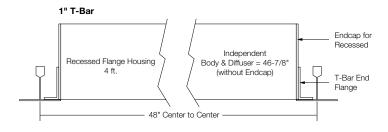
Two mounting options: threaded rod and screw mounting options. Mounting locations are located on each end of the lumianire. Mounting location is 6" away from each end of luminaire.

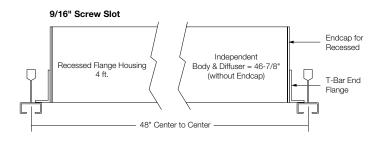
#### **T-Bar Installation**

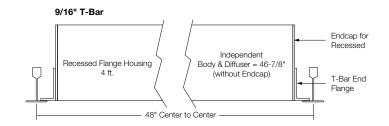


HP-4 R for T-Bar installations comes standard with a splice plate at the end of the luminaire. Mounting brackets (supplied) secure the luminaire to T-Bar and provide support to structure location. All even foot length (2, 4, 6, ...) luminaire runs are reduced in length by an appropriate amount to fit within typical 2x2 and 2x4 T-Bar grid systems. For uncommon T-Bar systems please consult factory.

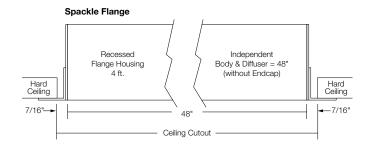
#### Grid Length Detail - 4' Example

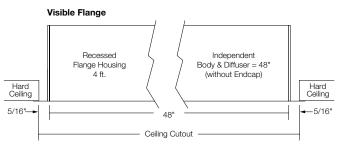






### Hard Ceiling Length Detail - 4' Example





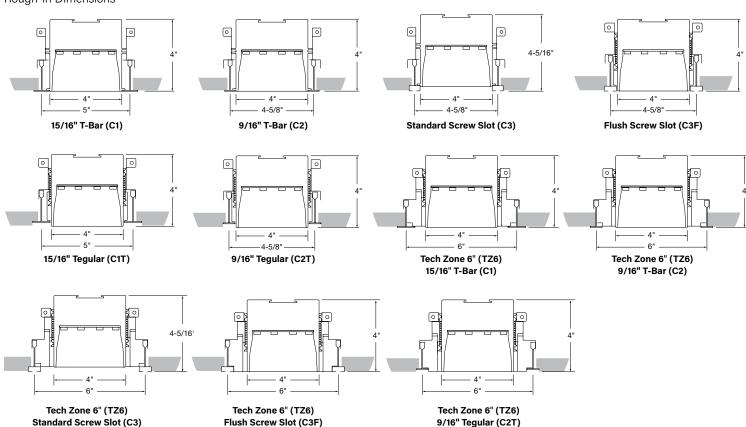
Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732

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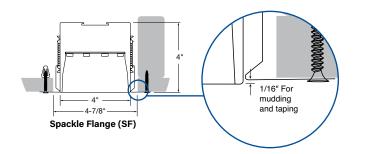
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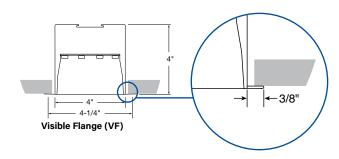
#### **Recessed Mounting Types** - T-Bar

Rough-In Dimensions

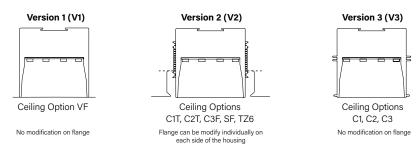


#### **Recessed Mounting Types** - Cutout Dimensions





#### **HOUSING**



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Ordering Info:		Better Lighting	

#### **ACCENT LIGHT POSITIONING**

#### **Lamp Specifications**

Base Type: GU 5.3 Voltage: 120V or 277V Max Wattage: 10W

MR16 LED lamps by others

# Independent Luminaires

A MR16 can be placed at the end of the luminaire.

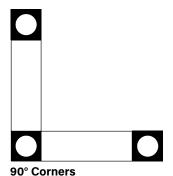
#### Accent Light Specifications

A separate feed drop is required for MR16s connected to different controllers.



Illuminated Sections (SI) or Non-Illuminated Section (NB)

Sections between LED MR16 lamps can be illuminated (**SI**) or non-illuminated (**NB**). The same Flush diffuser (**F**) material is used.



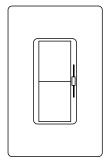
A MR16 can be placed at corner and each end of the luminaire.

The following MR16 model list has been tested and qualified compatible with Finelite's HP-4. Finelite doesn't manufacture MR16 lamps.



Manufacturer	Model	Wattage (w)
Soraa	SM16-07-10D-940-03	7.5
Soraa	SM16-07-10D-830-03	7.5
Soraa	SM16-09-25D-830-H1	9
Euri Lighting	EM16-2000ew	6.5
GreenCreative	MR16 12V 6W DIM. 35W R	6
USHIO	UPHORIA PRO LED MR16	7
Philips	Philips 7MR16 ExpertColor	7

NOTE: Tunable white not available on MR16 lamps.



Socket Dimmer Compatible Matrix		
Manufacturer	Model	
Lutron	DVELV-300P	
Lutron	Nova T NTELV-300	
Leviton	Renoir II AWSMT-EAW	
Leviton	IPE04	



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)

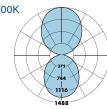
70.5 watts (17.6 W/ft)

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	
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			
	†H1	† <b>V</b>	
↓H¹	5704 (†53% l 47% <b>↓</b> )	6568 (↑59% I 41%↓)	
↓ <b>V</b>	6470 (↑47% I 53%↓)	7334 (†53% l 47%↓)	

Light Output, 3700K, 80 CRI (Lumens Per Foot)			
	↑ <b>H</b> ¹	↑ <b>V</b>	
↓H¹	1426	1642	
↓V	1618	1834	

Single Mode Power, 3700K (Watts Per Foot)			
	↑ <b>H</b> ¹	↑ <b>V</b>	
↓H ¹	13.5	15.6	
↓V	15.6	17.6	

	Dual Mode Power, 3700K (Watts Per Foot)					
†H1					<b>↑V</b>	
Status	Occupied	LPD	Unoccupied	Occupied	LPD	Unoccupied
↓H¹	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)			
	↑ <b>H</b> ¹	† <b>V</b>	
↓H¹	106	105	
↓V	104	104	

H - High Output, V - Very High Output

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

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	<b>3200K</b> 0.98		
<b>3700K</b> 1.00			
4300K	<b>4300K</b> 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: 1618 lm/ft x 0.98 = 1586 lm/ft. watts/foot: 15.6 W/ft.

Efficacy = 
$$\frac{1586 \frac{\text{Im}}{\text{ft.}}}{15.3 \frac{\text{W}}{\text{ft}}} = 104 \text{ Im/W}$$



Direct Photometry - 4' Luminaire 3700K

HP4-P-D-4'-V-837-DSO

Downlight: Downlight Spread Optic

Efficacy: 99 lm/W

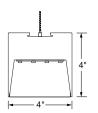
Total luminaire output: 3500 lumens (875 lm/ft)

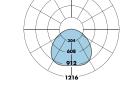
35.2 watts (8.8 W/ft)

Peak Candela Value: 972 @ 25°

CRI: 80 / CCT: 3700K

ITL LM79 Report 92993 (Family Correlated)





CANDELA DISTRIBUTION						
	0.0	22.5	45.0	67.5	90.0	FLUX
0	935	935	935	935	935	
5	928	929	934	939	940	111
15	888	901	929	963	971	326
25	788	816	895	955	972	508
35	664	711	820	892	901	622
45	529	583	696	750	759	641
55	395	442	536	572	575	566
65	266	298	361	380	379	420
75	147	162	192	198	197	239
85	43	46	51	49	49	68
90	0	0	0	0	0	

Direct Photometry - 4' Luminaire 3700K

HP4-P-D-V-837-F
Downlight: Flush Diffuser

Efficacy: 98 lm/W

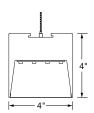
Total luminaire output: 3446 lumens (862 lm/ft)

35.2 watts (8.8 W/ft)

Peak Candela Value: 1242 @ 0°

CRI: 80 / CCT: 3700K

TL LM79 Report 85124 (Family Correlated)



CAI	NDELA	334 668 1002 1335	RIBU	TION	
0.0		45.0			FLUX
1242	1242	1242	1242	1242	

 1235
 1234
 1234
 1234

 1179
 1170
 1175
 1174

 11069
 1056
 1060
 1054

 917
 906
 906
 897

 743
 734
 733
 723

 560
 553
 551
 543

 375
 374
 373
 368

 204
 204
 205
 203

 58
 59
 60
 61

 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		
H¹ V		
2722	3500	

Light Output, 3700K, 80 CRI (Lumens Per Foot)		
H 1	V	
681	875	

Single Mode Power, 3700K (Watts Per Foot)		
H1	V	
6.8	8.8	

	Dual Mode Power, 3700K (Watts Per Foot)					
H 1				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 1	V	
101	99	

H - High Output, V - Very High Output

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

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 1	V	
2680	3446	

Light Output, 3700K, 80 CRI (Lumens Per Foot)		
H 1	V	
670	862	

Single Mode Power, 3700K (Watts Per Foot)		
H 1	V	
6.8	8.8	

Dual Mode Power, 3700K (Watts Per Foot)						
H1		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 1	V	
99	98	

H - High Output, V - Very High Output

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

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 Im  $\times$  0.98 = 3377 Im Total Light Output per Foot: 862 Im/ft  $\times$  0.98 = 845 Im/ft. watts/foot: 8.8 W/ft.

Efficacy =  $\frac{845 \frac{\text{lm}}{\text{ft.}}}{8.8 \frac{\text{W}}{\text{ft}}} = 96 \text{ lm/W}$ 

Submitted by:		Date:	FINE
Туре:	Project:		
Ordering Info:			Better L

## Indigo Clean Dual Mode - Basic Wiring Diagram

#### WIRING DIAGRAM

#### **Occupancy Sensor Notes:** • An Occupancy sensor with an isolated relay is required. Connect the 24V coming from the Power Pack to the Relay Comm • Wire out with the Normally Closed (N.C.) relay and connect to the Red/Blue of the luminaires Neutral (Wht) · Cap red AC wires. **Luminaire Notes:** Neutral (Wht) • Constant Hot Power to all luminaires Unswitched Line (Blk) Line (Blk) All dimming requirements are managed through the lighting control Relay Comm 24V (Red) N.C. Comm (Blk) Comm (Blk) Power Pack Indigo-Clean Occupancy Sensor 0-10V **Dual-Mode Luminaire** 24V INPUT

#### **DUAL FEED DETAIL**

Dimmer "a"

**Dimmer Notes:** • Luminaires will only dim down to minimum output Luminaires will not turn off





