

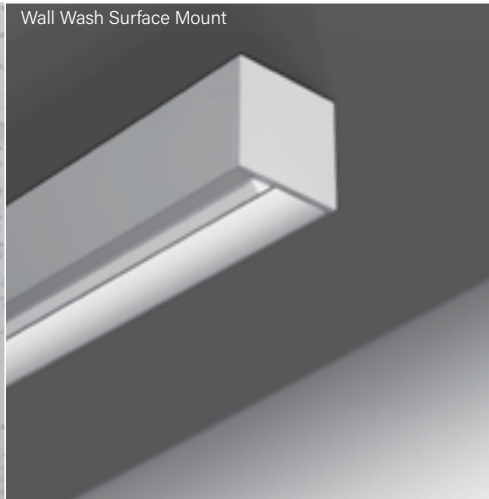
Submitted by:		Date:
Type:	Project:	
Ordering Info:		

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

T-Bar Surface Mount



Wall Wash Surface Mount



High Performance 4" Aperture is a patented, linear LED luminaire family. HP-4 delivers excellent performance using an advanced optical design and mid-power LEDs. Achieving 90% of initial light output at 100,000+ hours and backed by a 10-year performance-based warranty on all standard components.

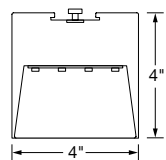
This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

Signal White is standard finish

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

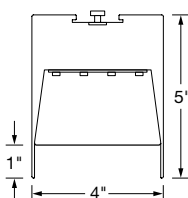
## CROSS SECTIONS

Surface Mount



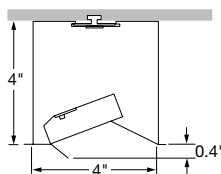
Flush Downlight Diffuser (standard)

Surface Mount Regressed



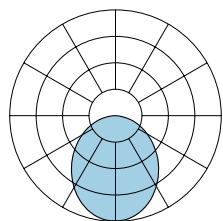
Flat Diffuser with 1" Regressed (RG)

Surface Mount Wall Wash

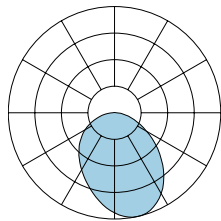


Kicker (standard)

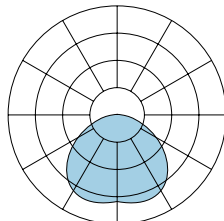
## OPTIC OPTIONS



Standard Downlight Optic (F)



Downlight Asymmetric Optic (DAO)



Downlight Spread Optic (DSO)

## ALSO AVAILABLE IN



Pendant (D, ID, I)



Wall Mount (WM)



Surface Mount (SM)



**Declare.**



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

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

Ordering Guide Example: HP - 4 - SM - D - 36' - S - 835 - F - 96LG - 120 - SC - FC-10% - C1 - FE - SW - LGD18W - OBO - CP

## BODY TYPE

## OUTPUT AND LED TYPE

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Run	Downlight Output (Flush)	LED CRI/CCT
HP - High Performance	4	SM - Surface Mount SM RG - Direct Regressed	D - Direct WW-D - Wall Wash Direct	Minimum 2' section length. Increments accurate to 1/16" (±1/32"), standard. 12' maximum section length.	S - Standard (379 lm/ft) B - Boosted (477 lm/ft) H - High (720 lm/ft) V - Very High (926 lm/ft) TL - Tailored: _____ lm/ft*	830 - 80 CRI, 3000K 835 - 80 CRI, 3500K 840 - 80 CRI, 4000K 930 - 90 CRI, 3000K 935 - 90 CRI, 3500K 940 - 90 CRI, 4000K 8TW - 80 CRI, Tunable White 9TW - 90 CRI, Tunable White

## MECHANICAL/OPTICAL OPTIONS

## ELECTRICAL OPTIONS

Downlight	Reflector System	Voltage	Circuiting <sup>4</sup>
F - Flush (standard) BG - Bottom Glow DL - 1" Drop Down Lens DSO - Downlight Spread Optic <sup>3</sup> DAO-L - Downlight Asymmetric Optic Left <sup>3,11</sup> DAO-R - Downlight Asymmetric Optic Right <sup>3,11</sup> FO - Fully Open for Wall Wash only K - Kicker for Wall Wash only (standard) <sup>2</sup> RG-D - Flat Diffuser with 1" Regress <sup>1</sup> RG-WCB - White Cross Blade Baffle <sup>1</sup> RG-LHE - Hollowed Ellipse Louver <sup>1</sup> RG-LHC - Hex Louver <sup>1</sup>	96LG - 96 Low Gloss White SSA - Semi-Specular Aluminum for Wall Wash only	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage	SC - Single Circuit*  Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)

## ELECTRICAL OPTIONS

## MOUNTING OPTIONS

## OTHER OPTIONS

Driver Selection <sup>5</sup>	Ceiling Hardware Type	Endcap Style	Finish
<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>6</sup> OTI-1% - EldoLED OTI, 0-10V 1% <sup>6</sup> ELD-10V-0% - EldoLED SOLOdrive, 0-10V 0.1% 10V-TW-10% - EldoLED OTI, 0-10V 10% (Tunable White) <sup>6</sup> <b>DALI Driver Options</b> FC-DALI-1% - DALI 1% DXL-DALI-1% - EldoLED Dexal, 1% ELD-DALI-0% - EldoLED SOLOdrive, 0.1% ELD-DALI-TW - EldoLED DUALdrive LightShape, 0.1% (Tunable White)	<b>Lutron Driver Options</b> LUT-ES1 - Lutron, Ecosystem 1% LUT-TW - Lutron T-Series, EcoSystem 0.1% (Tunable White)	C1 - 15/16" T-Bar C2 - 9/16" T-Bar C3 - Screw Slot C4 - Hard Ceiling	FE - Flat Endcap (standard) DE - 1" Drop Endcap <sup>8</sup> OE - Open Endcap <sup>9</sup> SW - Signal White (standard) FB - Finelite Black SA - Satin Aluminum ##### - RAL Color Code <sup>10</sup>

## OTHER OPTIONS

Emergency Style (Optional) See page 5 Backup Battery table	Integrated Sensor (Optional)	Special Options (Optional)
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 ALCR - Automatic Load Control Relay  See Backup Battery table on page 5 for fitment limitations	OBO - Occupancy <sup>11</sup> OBD - Daylight <sup>11</sup> W601 - Wattstopper Sensor <sup>12</sup> OBE - Enlighted <sup>13</sup> REE - Remote Enlighted <sup>14</sup> CLM-99 - Encelium RF SLM-99 - Encelium Sensor	AOCC-W - Lutron Athena Sensor <sup>15</sup> (Device Color White) AOCC-B - Lutron Athena Sensor <sup>15</sup> (Device Color Black) ARF-W - Lutron Athena RF <sup>15</sup> (Device Color White) ARF-B - Lutron Athena RF <sup>15</sup> (Device Color Black) VOCC - Lutron Vive Sensor <sup>16</sup> VRF - Lutron Vive RF <sup>16</sup> CP - Chicago Plenum <sup>17</sup> RLA - Red List Approved RLD - Red List Declared

<sup>1</sup> Regressed only

<sup>2</sup> Kicker standard in Signal White. Customer Custom color kickers have a surcharge

<sup>3</sup> Not available with Regressed or Curves

<sup>4</sup> Contact factory for switching options

<sup>5</sup> See page 3 for more details

<sup>6</sup> Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO)

<sup>7</sup> B & V outputs only

<sup>8</sup> 1" Drop Down Lens downlight only

<sup>9</sup> Available with Hollowed Ellipse Louver (LHE) only

<sup>10</sup> 20 business days lead time for color

<sup>11</sup> Not available with Wall Wash

<sup>12</sup> LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected.

<sup>13</sup> LMFS-601 w/ Dali driver, only 1 driver can be connected.

<sup>14</sup> Enlighted components installed by Finelite, provided by others

<sup>15</sup> Enlighted for Wall Wash fixtures. Enlighted Control Unit & Sensor Cable installed for Remote mounting sensor

<sup>16</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>17</sup> Lutron Vive Ingrated Sensors require a DALI driver

<sup>18</sup> Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox

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

# High Performance 4" Aperture (HP-4) Surface 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>10V-TW-10%</b>	EldoLED OTi, 0-10V 10% Dimming, Tunable White (Linear)
<b>10V-TW-10%-DTO</b>	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, Tunable White (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>DXL-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)
<b>ELD-DALI-TW</b>	EldoLED DUALdrive Light Shape, DALI 0.1% Dimming, Tunable White (Logarithmic Dimming, Linear CCT Control)

### Lutron Driver Options

<b>LUT-ES1</b>	Lutron, Ecosystem 1% Dimming
<b>LUT-TW</b>	Lutron T-Series, EcoSystem 0.1% Dimming, Tunable White

Submitted by:		Date:
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Ordering Info:		

# High Performance 4" Aperture (HP-4) Surface 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" (±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<sup>1</sup>:** Illuminated corners of greater than 60° and less than 180° in a single plane, available with Flush Diffuser, Bottom Glow Diffuser, Regressed Diffuser, White Cross Blade Baffle<sup>2</sup> or Wall Wash. Corners not available with Wall Wash (**WW-D**), Hollowed Ellipse Louver (**LHE**), Hex Louver (**LHC**) or 1" Drop Down Lens. Consult factory for tailored lighting options.

### OUTPUT AND LED TYPE

**LIGHT OUTPUT:** Four lumen packages available, Standard (**S**), Boosted Standard (**B**), 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.

### MECHANICAL/OPTICAL OPTIONS

**DOWNLIGHT OPTION:** 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 77% 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>3</sup>, Ellipse Louver (**LHE**)<sup>3</sup>, Hex Louver (**LHC**)<sup>3</sup>, Downlight Spread Optic (**DSO**), Downlight Asymmetric Optic Left and Right (**DAO-L**, **DAO-R**), and Regressed downlight diffusers (**RG**). 1" Drop Down Lens made of acrylic. Available with a solid endcap or an endcap with a diffuse filler to continue the luminous aesthetic. Downlight Spread Optic (**DSO**) & Downlight Asymmetric Optic (**DAO**) are an extruded lenses with a subtle ribbed appearance providing desired improved optical performance. Consult factory for more tailored lumen outputs.

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

**REFLECTORS:** Die-formed 20-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint. The standard Semi-Specular Aluminum (**SSA**) Kicker (**K**) reflector delivers light high on the vertical surface. The Kicker reflector can be easily removed for open distribution (**FO**).

### 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.

**TUNABLE WHITE FEED:** Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when fixture current exceeds 5 amps.

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

**TUNABLE WHITE DRIVER:** Replaceable LED driver. Driver is accessible from below the ceiling. 120V, 277V, and 347V.

- **Power factor:** ≥0.90
- **Total Harmonic Distortion (THD):** <20%
- **Dimming Range:** 100%-10%
- **Expected driver lifetime:** 100,000 hours

**LUTRON TUNABLE WHITE DRIVER OPTION: LUT-TW** (0.1% T-Series 2-Channel Digital Tunable White (PSQ Series)).

### MOUNTING OPTIONS

**HANGING HARDWARE:** 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).

**TUNABLE WHITE HANGING HARDWARE:** For grid ceiling applications the dual GridBox™ mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard).

**TUNABLE WHITE INTERCONNECTION CABLES:** Luminaires are pre-wired with plug-and-play interconnection cables to support easy plug-together joining of fixture runs.

### OTHER FEATURES

**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. Open Endcap (**OE**) is for use with the Hollowed Ellipse Louver (**LHE**)<sup>5</sup>; 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-SM-D</b>		
Min. Housing Length	8'	4'
EM Lumen Output	1854	1102
EM Section Illum.	2'	2' or 4'
<b>HP4-SM-WW-D</b>		
Min. Housing Length	8'*	4'*
EM Lumen Output	2000	1189
EM Section Illum.	4'	4'

\* 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 7.

<sup>1</sup> Not available with Wall Wash

<sup>2</sup> White Cross Blade (WCB) baffles not available with custom angles. Available in 90 degrees only

<sup>3</sup> Regressed only

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

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

## Specifications

### Bodine GTD and Legrand ALCR Min. Length

Configuration	Min Length
Generator	D-2'; ID-3'
Generator + OCC	D-2'; ID-3'
Daylight	D-2'; ID-3'
Generator + Daylight	D-2'; ID-3'

### TUNABLE WHITE ELECTRICAL OPTIONS<sup>6</sup>:

- **TW Driver Options 0-10V:** EM/GEN, GTD or Battery Back up
- **DALI:** EM/GEN, GTD or Battery Back up
- **LUTRON:** EM/GEN, GTD or Battery Back up

**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.

**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. These fixtures are rated for Damp Location. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 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>:** SM - 2.8 lb/ft; WW - 2.9 lb/ft

**WARRANTY:** 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

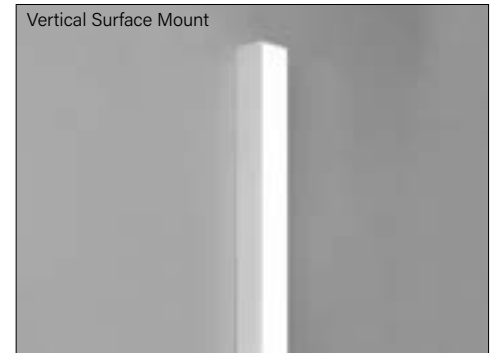
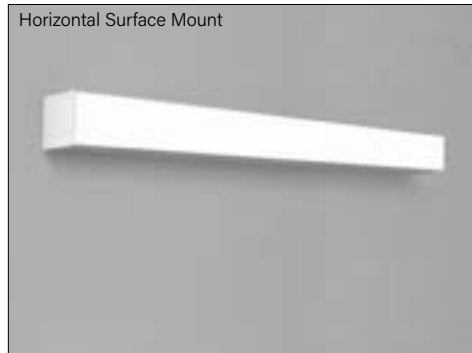
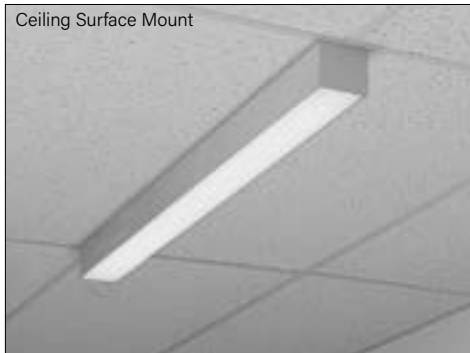
<sup>5</sup> Regressed only

<sup>6</sup> Consult Finelite for Generator Transfer Device and Battery Backup fit

<sup>7</sup> 20 business days lead time for color

<sup>8</sup> Excludes Battery Backup and Generator Transfer Device weight

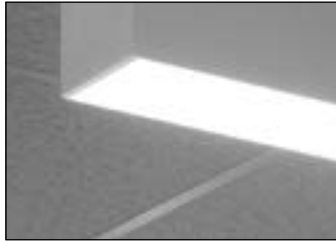
## SURFACE MOUNT OPTIONS



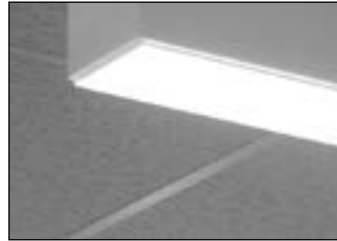
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# High Performance 4" Aperture (HP-4) Surface Mount

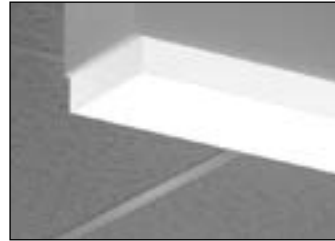
## AESTHETIC OPTIONS



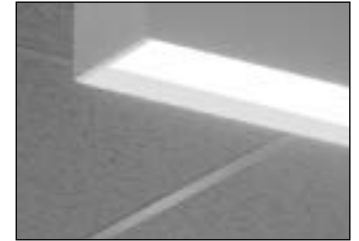
Flush Diffuser (F)



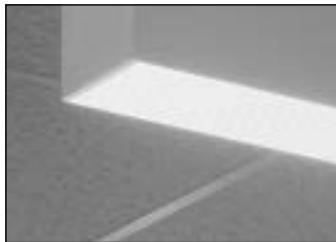
Bottom Glow Diffuser (BG)



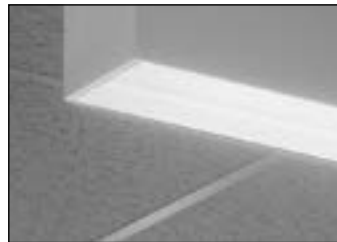
1" Drop Down Lens (DL)



Flat Diffuser with 1" Regressed (RG-D)



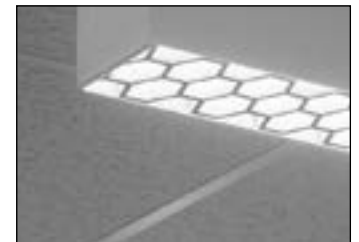
Downlight Spread Optic (DSO)  
Externally flush



Downlight Asymmetric Optic (DAO)  
Externally flush



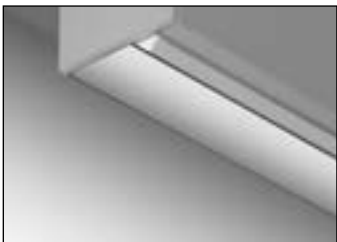
White Cross Blade Baffle<sup>1</sup> (RG-WCB)



Hex Louver<sup>1</sup> (RG-LHC)



Hollowed Ellipse Louver<sup>1</sup> (RG-LHE)



Kicker (K) - Wall Wash only

<sup>1</sup> Not available with Wall Wash

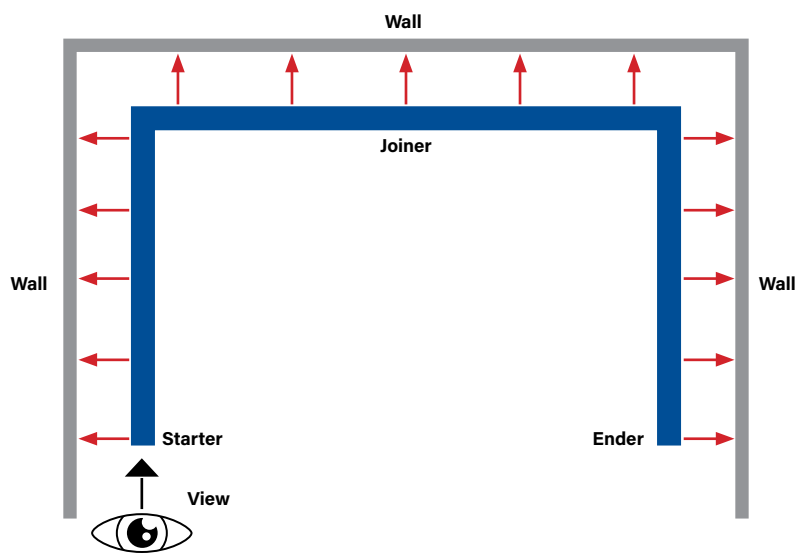
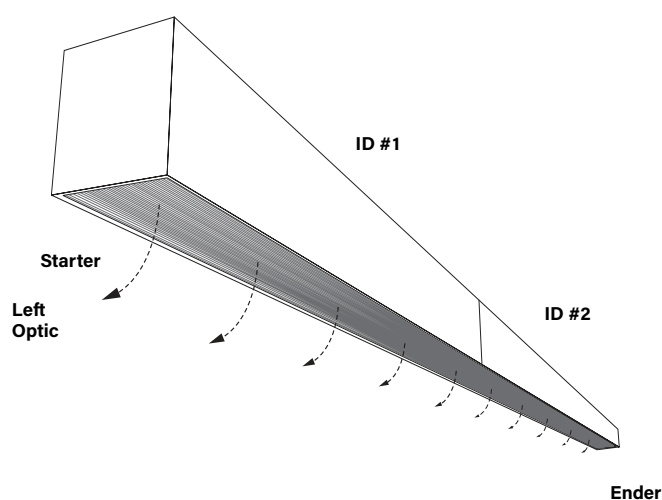
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# High Performance 4" Aperture (HP-4) Surface Mount

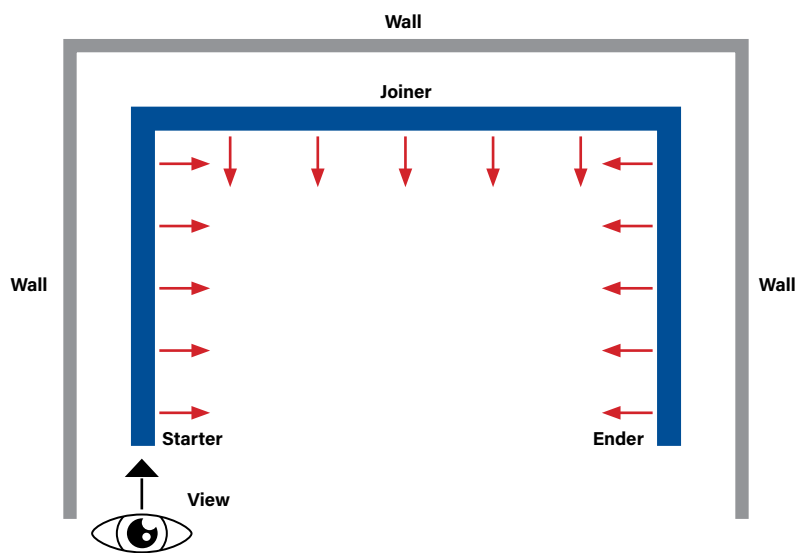
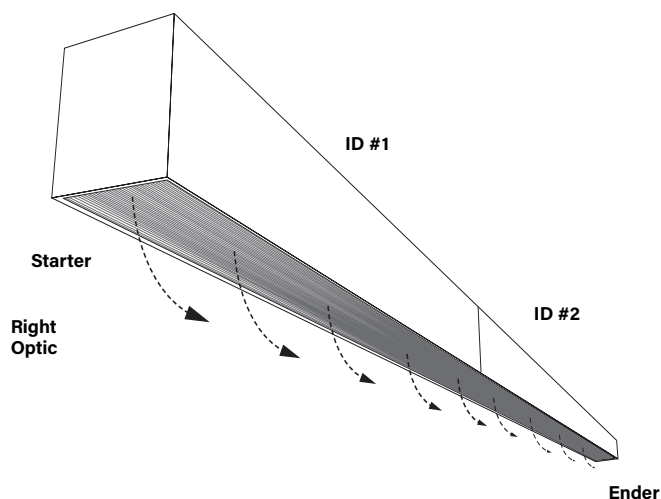
## DOWNLIGHT ASYMMETRIC OPTIONS

The diagrams below show a linear run from power feed to ender. Specifying DAO-L distributes light to the left or 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.



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

## Direct Photometry - 4' Luminaire 3500K

### HP4-SM-D-4'-V-835

**Downlight:** Flush Diffuser

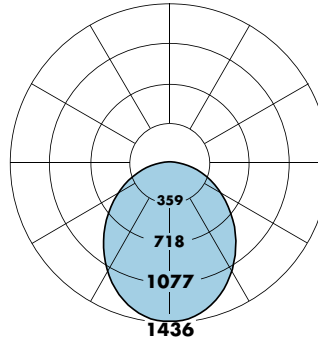
**Efficacy:** 100 lm/W

**Total luminaire output:** 3705 lumens (926 lm/ft)  
37 watts (9.3 W/ft)

**Peak Candela Value:** 1436 @ 0

CRI: 80 / CCT: 3500K

ITL LM79 Report 85124



CANDELA DISTRIBUTION						
	0.0	22.5	45	67.5	90	Flux
0	1436	1436	1436	1436	1436	
5	1428	1428	1427	1427	1427	135
15	1363	1353	1358	1357	1350	382
25	1236	1221	1226	1219	1212	563
35	1060	1047	1048	1037	1030	653
45	859	849	848	836	831	652
55	647	639	637	628	623	568
65	434	432	431	425	424	425
75	236	236	237	235	236	250
85	67	68	69	70	69	77
90	0	0	0	0	0	

### Sample Lumen Adjustment Calculation

#### Lumen Adjustment Factors 80 CRI

<b>3000K</b>	0.985
<b>3500K</b>	1.000
<b>4000K</b>	1.032

#### Lumen Adjustment Factors 90 CRI

<b>3000K</b>	0.746
<b>3500K</b>	0.760
<b>4000K</b>	0.789

High Output (H), 4000K, 90 CRI

**Lumen Adjustment Factor:** 0.789

**Total Light Output:** 2882 lm x 0.789 = 2274 lm

**Total Light Output per Foot:** 720 lm/ft x 0.789 = 568 lm/ft.

**watts/foot:** 71 W/ft.

$$\text{Efficacy} = \frac{568 \frac{\text{lm}}{\text{ft.}}}{71 \frac{\text{W}}{\text{ft.}}} = 80 \text{ lm/W}$$

#### Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
1517	1907	2882	3705

#### Light Output, 3500K, 80 CRI (Lumens Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
379	477	720	926

#### Power, 3500K (Watts Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
3.6	4.6	7.1	9.3

#### Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
105	107	102	100

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

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

<sup>1</sup> Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

<sup>2</sup> Based on ITL report: 89124



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

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

## Direct Photometry - 4' Luminaire 3500K

**HP4-SM-D-4'-V-835-DAO**

**Downlight:** Downlight Asymmetric Optic

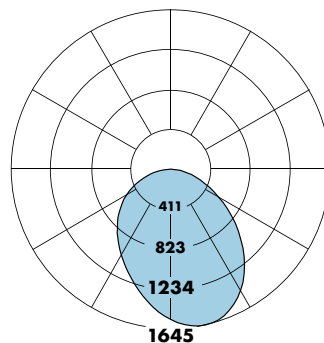
**Efficacy:** 109 lm/W

**Total luminaire output:** 3884 lumens (971 lm/ft)  
35.6 watts (8.9 W/ft)

**Peak Candela Value:** 1645 @ 12.5°

CRI: 80 / CCT: 3500K

ITL LM79 Report 94331



	0.0	22.5	45.0	67.5	90.0	Flux
0	1552	1552	1552	1552	1552	
5	1609	1591	1543	1494	1476	146
15	1641	1599	1468	1341	1292	413
25	1538	1506	1323	1153	1110	609
35	1315	1314	1116	960	939	704
45	1019	1052	872	768	779	691
55	710	759	629	578	616	587
65	438	476	404	391	436	423
75	216	239	214	218	248	239
85	57	62	63	64	70	70
90	0	0	0	0	0	

### Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
1590	1999	3021	3884

### Light Output, 3500K, 80 CRI (Lumens Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
397	500	755	971

### Power, 3500K (Watts Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
3.5	4.4	6.8	8.9

### Efficacy, 3500K, 80 CRI (Lumens Per Watt)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
114	113	111	109

### Sample Lumen Adjustment Calculation

#### Lumen Adjustment Factors 80 CRI

<b>3000K</b>	0.985
<b>3500K</b>	1.000
<b>4000K</b>	1.032

#### Lumen Adjustment Factors 90 CRI

<b>3000K</b>	0.746
<b>3500K</b>	0.760
<b>4000K</b>	0.789

High Output (H), 4000K, 90 CRI

**Lumen Adjustment Factor:** 0.789

**Total Light Output:** 3021 lm x 0.789 = 2384 lm

**Total Light Output per Foot:** 755 lm/ft x 0.789 = 596 lm/ft.  
**watts/foot:** 6.8 W/ft.

$$\text{Efficacy} = \frac{596 \frac{\text{lm}}{\text{ft.}}}{6.8 \frac{\text{W}}{\text{ft.}}} = 88 \text{ lm/W}$$

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

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

<sup>1</sup> Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

<sup>2</sup> Based on ITL report: 94331

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

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

## Wall Wash Direct Photometry - 4' Luminaire 3500K

**HP4-SM-WW-D-K-4'-V-835**

**Downlight:** With Kicker

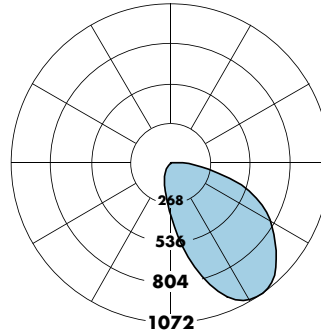
**Efficacy:** 92 lm/W

**Total luminaire output:** 1816 lumens (454 lm/ft)  
21.5 watts (5.4 W/ft)

**Peak Candela Value:** 1072 @ 35°

CRI: 80 / CCT: 3500K

ITL LM79 Report 85130



CANDELA DISTRIBUTION						
	0.0	22.5	45.0	67.5	90.0	FLUX
0	373	373	373	373	373	
5	495	456	374	306	281	37
15	791	649	366	209	175	121
25	1018	818	347	147	115	217
35	1072	896	315	101	72	294
45	996	848	271	62	35	328
55	842	708	214	28	6	311
65	673	536	149	5	6	259
75	407	363	84	4	5	173
85	157	137	25	0	0	70
90	75	54	0	0	0	

### Sample Lumen Adjustment Calculation

#### Lumen Adjustment Factors 80 CRI

<b>3000K</b>	0.985
<b>3500K</b>	1.000
<b>4000K</b>	1.032

#### Lumen Adjustment Factors 90 CRI

<b>3000K</b>	0.746
<b>3500K</b>	0.760
<b>4000K</b>	0.789

High Output (H), 4000K, 90 CRI

**Lumen Adjustment Factor:** 0.789

**Total Light Output:** 1412 lm x 0.789 = 1114 lm

**Total Light Output per Foot:** 353 lm/ft x 0.789 = 279 lm/ft.

**watts/foot:** 3.8 W/ft.

$$\text{Efficacy} = \frac{279 \frac{\text{lm}}{\text{ft}}}{3.8 \frac{\text{W}}{\text{ft}}} = 73 \text{ lm/W}$$

#### Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
743	935	1412	1816

#### Light Output, 3500K, 80 CRI (Lumens Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
186	234	353	454

#### Power, 3500K (Watts Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
2.0	2.5	3.8	5.0

#### Efficacy, 3500K, 80 CRI (Lumens Per Foot)

S <sup>1</sup>	B <sup>1</sup>	H <sup>1</sup>	V <sup>2</sup>
91	92	92	92

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

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

<sup>1</sup> Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

<sup>2</sup> Based on ITL report: 86130

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

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

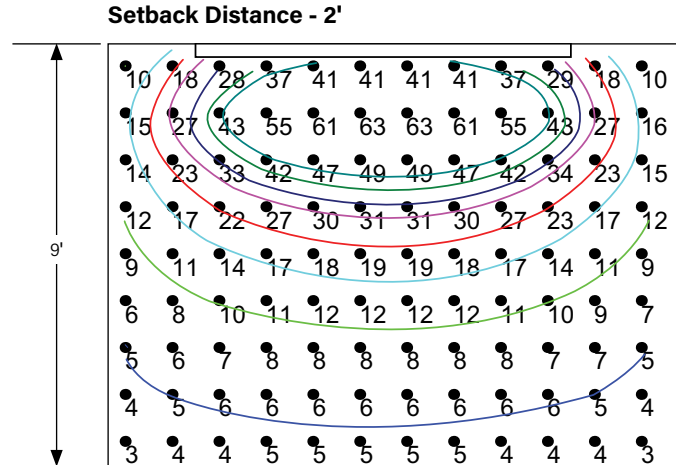
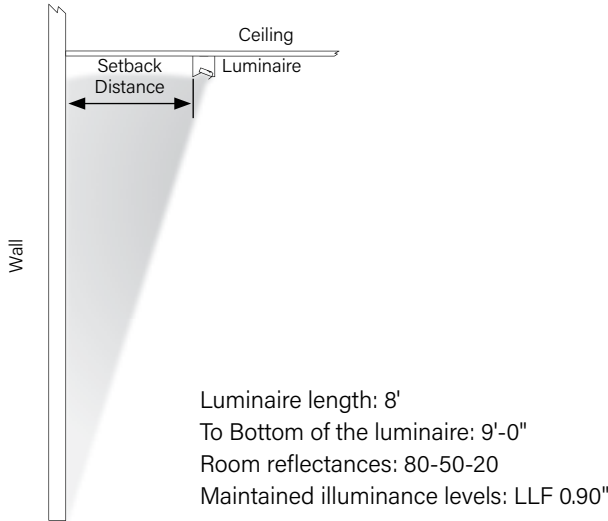
## SETBACK INFO AND APPLICATION DATA - WALL WASH SURFACE MOUNT

**HP4-SM-WW-D-K-4'-V-835**

**Downlight:** With Kicker

**Total luminaire output:** 1450 lumens (363 lm/ft)  
19.1 watts (4.8 W/ft)

CRI: 80 / CCT: 3500K



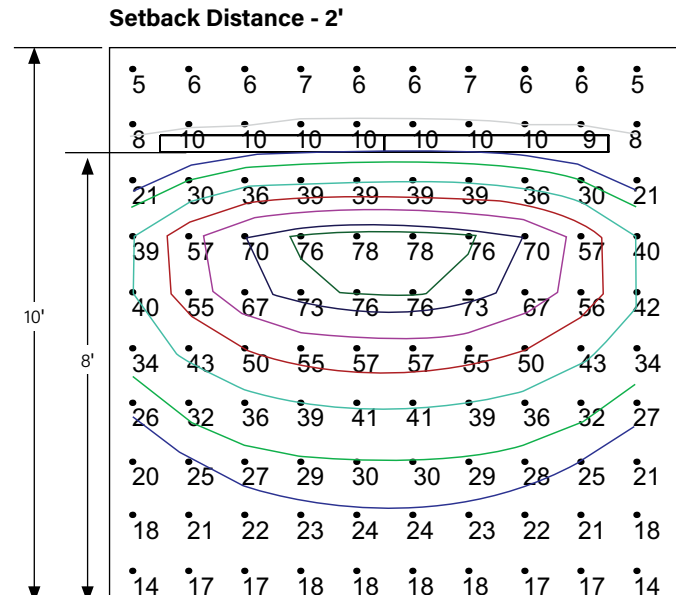
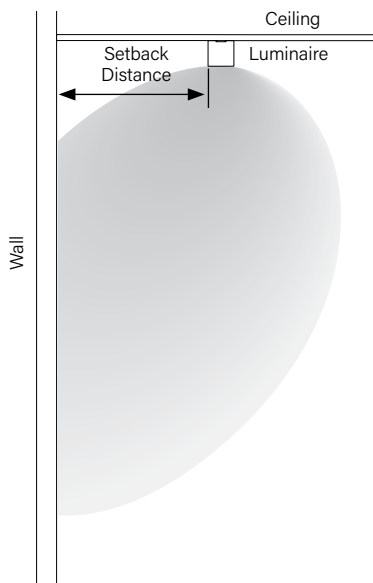
## Downlight Asymmetric Optic - Setback Info and Application Data

**HP4-SM-D-4ft-V-835-DAO**

**Downlight:** DAO

**Total luminaire output:** 3884 lumens (971 lm/ft)  
35.6 watts (8.9 W/ft)

CRI: 80 / CCT: 3500K



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

# 0-10V Tunable White

Finelite's award-winning, contractor friendly Tunable White luminaires are available at low cost, with powerful and simple 0-10V tuning and intensity controls.

## TUNABLE WHITE FEATURES

- CCT range: 2700K - 6500K
- Dimming Range: 100% to 10%
- CRI Options: 80 CRI or 90 CRI

## LUMINAIRE FAMILY MODIFICATIONS/RESTRICTIONS

Surface Mount Direct	Section Lengths										
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'
Output S,B,H,V Single Circuit	Rows can be comprised of 2'-12' sections. Tailored lengths available.										
Integral Battery Backup (BSL310LP)							✓		✓		✓

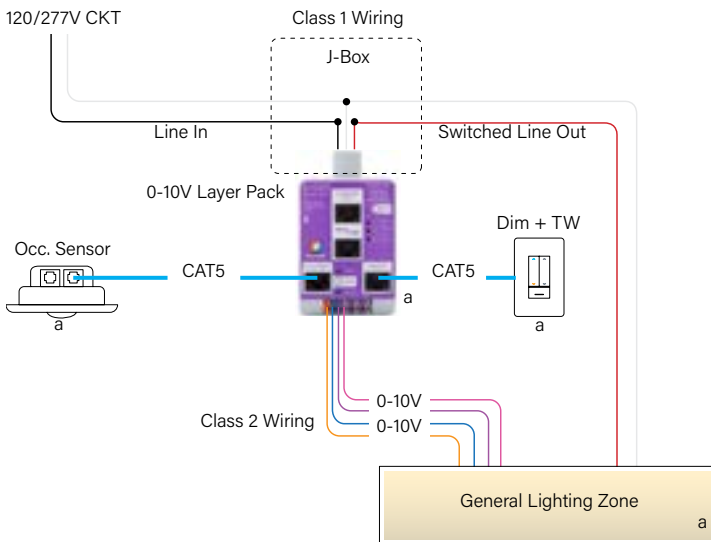
## PHOTOMETRY

Apply a power adjustment factor to calculate wattage usage

POWER	CONVERSION FACTOR
	<b>1.1X</b>

(Example: a 50 watt luminaire in static white would draw 55 watts using 0-10V Tunable White)

## WIRING DIAGRAM - DIMMABLE TO 10%



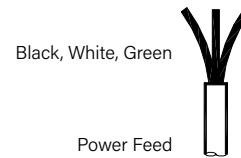
Luminaire Wiring

- **Purple (+) / Pink (-)** control wires are for intensity control
- **Orange (+) / Blue (-)** control wires are for Tunable White control

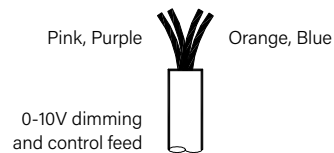
**Note:**

Load or Dim to Off options available.

## DUAL FEED DETAIL



WIRING LEGEND		
<b>Black</b>	Hot	Line Voltage
<b>White</b>	Neutral	Line Voltage
<b>Green</b>	Ground	



WIRING LEGEND		
<b>Pink</b>	Dimming	0-10V DC
<b>Purple</b>	Dimming	0-10V DC
<b>Orange</b>	TW	0-10V DC
<b>Blue</b>	TW	0-10V DC

