Submitted by:		Date:	FINELITE'
Туре:	Project:		
Ordering Info:	Better Lighting		

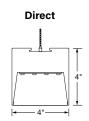


High Performance 4" Aperture Curved Sections are patented luminaires that add design flexibility to the HP-4 family. Curved Sections deliver continuous illumination and are available in 45°, 90°, and 180° angles with 2', 3', and 4' diameter options. All Curved Sections can be joined to HP-4 linear to create a multitude of configurations and are equipped with universal and robust joining hardware for strong and repeatable joints ensuring seamless transitions.

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

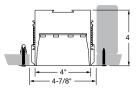
Signal White is standard finish

### **CROSS SECTIONS**



Flush Downlight Diffuser

## **Recessed Spackle Flange**



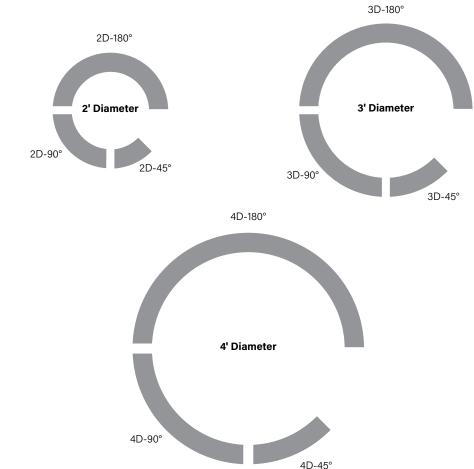
Flush Downlight Diffuser

### **Surface Mount**



Flush Downlight Diffuser

# **SIZE OPTIONS**















Submitted by:		Date:	FINEL
Туре:	Project:		
Ordering Info:			Better Ligh

Ordering Guide Example: HP - 4 - P - D - 36' - S - 835 - F - 96LG - 120 - SC - FC-10% - FA50 - C1 - FE - SW - LGD18W - OBO - CP - RS 5x5

#### BODY TYPE

#### OUTPUT AND LED TYPE

Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Length of Configuration	Downlight Output	LED CRI/CCT
HP - High Performance	4	P - Pendant R - Recessed (Spackle Flange Only) SM - Surface Mount	D - Direct	Total length to be calculated by factory.  Mimimum 2' increments accurate to 1/16" (±1/32") standard. 12' maximum section length.  Use Configuration section to specify size and shape.	S - Standard (377 lm/ft) B - Boosted (474 lm/ft) H - High (717 lm/ft) V - Very High (922 lm/ft) TL - Tailored:lm/ft *  Lumens provide are for 2' dimensions. * Specify lm/ft of outputs between Standard (5) and Very High (V). Consult factory for tailored lumen output outside of this range.	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 FEATURES

#### **ELECTRICAL OPTIONS**

Downlight	Reflector System	Voltage	Circuiting <sup>1</sup>	<b>Driver Selection</b>	
F - Flush (standard)	96LG - 96 Low Gloss White	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage	SC - Single Circuit	0-10V Driver Options FC-10% - 0-10V 10% (standard) FC-1% - 0-10V 1% OTi-10% - EldoLED OTi, 0-10V 10% <sup>2, 9</sup> OTi-1% - EldoLED OTi, 0-10V 1% <sup>2, 9</sup> ELD-10V-0% - EldoLED SOLOdrive, 0-10V, 0.1% <sup>10</sup>	Lutron Driver Options LUT-ES1 - Lutron, Ecosystem 1% <sup>10</sup> LUT-TW - Lutron T-Series, EcoSystem 0.1% (Tunable White) <sup>11</sup>
				10V-TW-10% - EldoLED OTi, 0-10V 10% (Tunable White) 2-10  DALI Driver Options  FC-DALI-1% - DALI 1% 10  DXL-DALI-1% - EldoLED Dexal, 1% 10  ELD-DALI-0% - EldoLED SOLOdrive, 0.1% 10  ELD-DALI-TW - EldoLED DUALdrive LightShape, 1% (Tunable White) 10	See Page 3 for additional driver options and details

#### MOUNTING OPTIONS OTHER OPTIONS

Mounting Method	Ceiling Hardware Type <sup>6</sup>	Endcap Style	Finish	Emergency Style (Optional) <sup>8</sup> See page 5 Backup Battery table	Integrated Sensor (Optional) <sup>8</sup>
FA50 - Fully Adjustable 50' <sup>4</sup> FA100 - Fully Adjustable 100' <sup>4</sup> FA150 - Fully Adjustable 150' <sup>4</sup> FA200 - Fully Adjustable 200' <sup>4</sup> FA250 - Fully Adjustable 250' <sup>4</sup> FA300 - Fully Adjustable 300' <sup>4</sup> SF - Spackle Flange <sup>5</sup> 99 - Custom	C3 - Screw Slot C4 - Hard Ceiling C1T - 15/16" Tegular	FE - Flat Endcap (standard)	SW - Signal White FB - Finelite Black SA - Satin Aluminum #### - RAL Color Code 7  99 - Custom Color 7	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	OBO - Occupancy OBD - Daylight

#### OTHER OPTIONS

Special Options (Optional)	Configuration <sup>11</sup>		
CP - Chicago Plenum ⁵	RS Rounded Square (side 1 x curve section)		
RLA - Red List Approved	RRx Rounded Rectangle (side 1 x side 2 x curve section)		
RLD - Red List Declared	RLx Rounded " L " Shape (side 1 x side 2 x curve section)		
	RUxx Rounded " U " Shape (side 1 x side 2 x side 3 x curve section)		
	ARC Arc (curve section)		
	99CFG - Custom Configuration 12		

### Lead times is 8-weeks.

- <sup>1</sup> Contact factory for switching options
- <sup>2</sup> Add DTO to gain "Dim to Off" functionality (FC-10% DTO,
- FC-1% DTO)
  <sup>3</sup> B & V outputs only
- <sup>4</sup> Pendant only
- <sup>5</sup> Recessed and Pendant (Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox)
- <sup>6</sup> For Pendant and Surface Mount only
- <sup>7</sup> 20 business days lead time for color
- 8 Not available for curved sections but can be integrated into straight sections
- 9 Not available for 2D45 & 3D45
- $^{\rm 10}$  Not available for 2D45, 2D90, 2D180 & 3D45

- <sup>11</sup> See pages 9-10 for more details and examples
- <sup>12</sup> Please provide drawing with dimensions

Page 2

Submitted by:		Date:	FINELITE*
Туре:	Project:		
Ordering Info:			Better Lighting

### SUPPLEMENTARY DRIVER PAGE

	0-10V Driver Options
FC-10% <sup>1</sup>	Factory Choice 0-10V 10% Dimming (Linear)
FC-10%-DTO <sup>1</sup>	Factory Choice 0-10V 10% Dimming, Dim-to-Off (Linear)
FC-1% <sup>1</sup>	Factory Choice 0-10V 1% Dimming (Linear)
FC-1%-DTO <sup>1</sup>	Factory Choice 0-10V 1% Dimming, Dim-to-Off (Linear)
ELD-10V-0% <sup>2</sup>	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
ELD-10V-1% <sup>2</sup>	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
10V-TW-10% <sup>2</sup>	EldoLED OTi, 0-10V 10% Dimming, <i>Tunable White</i> (Linear)
10V-TW-10%-DTO <sup>2</sup>	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, <i>Tunable White</i> (Linear)
OTi-10% <sup>1</sup>	EldoLED OTi, 0-10V 10% Dimming (Linear)
OTi-10%-DTO <sup>1</sup>	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
OTi-1% <sup>1</sup>	EldoLED OTi, 0-10V 1% Dimming (Linear)
OTi-1%-DTO <sup>1</sup>	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

DALI Driver Options			
FC-DALI-1% <sup>2</sup>	Factory Choice DALI 1% Dimming (Logarithmic)		
DXL-DALI-1% <sup>2</sup>	EldoLED Dexal, DALI 1% Dimming (Logarithmic)		
ELD-DALI-0% <sup>2</sup>	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)		
ELD-DALI-1% <sup>2</sup>	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)		
ELD-DALI-TW <sup>2</sup>	EldoLED DUALdrive Light Shape, DALI 0.1% Dimming, Tunable White (Logarithmic Dimming, Linear CCT Control)		

Lutron Driver Options		
LUT-ES1 <sup>3</sup>	Lutron, Ecosystem 1% Dimming	
LUT-TW <sup>3</sup>	Lutron T-Series, EcoSystem 0.1% Dimming, Tunable White	

<sup>&</sup>lt;sup>1</sup> Not available for 2D45 & 3D45

<sup>&</sup>lt;sup>2</sup> Not available for 2D45, 2D90, 2D180 & 3d45

Not available for curved sections but can be integrated into straight sections

<sup>4</sup> B & V outputs only

Submitted by:		Date:	FINELITE
Туре:	Project:		
Ordering Info:			Better Lighting

### **SPECIFICATIONS**

### **BODY TYPE**

**CONSTRUCTION:** Precision-cut 6063-T4 extruded aluminum with 16 gauge steel assembly body.

**LINEAR LENGTHS:** At any length, 2-foot minimum, in increments down to 1/16th inch ( $\pm 1/32$ "). 12-foot maximum section length.

### **OUTPUT & LED TYPE**

**LIGHT OUTPUT:** Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). A separate chart summarizes lumen distribution and wattage. Light engines are replaceable. For Tailored Outputs (**TL**), specify  $Im/ft^2$  of outputs between those of Boosted (**B**) and Very High (**V**). Consult factory for tailored lumen output.

#### **MECHANICAL OPTIONS**

**DOWNLIGHT DIFFUSER:** Flush frost white snap-in lens standard, 80% transmissive, 99% diffusion.

**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.

### **ELECTRICAL OPTIONS**

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

### **TUNABLE WHITE FEED:**

TW Driver 0-10V: Power - 18/3, Control - 18/4;

**DALI:** Power/Control - 18/5; **LUTRON:** Power/Control - 18/5

All above feeds are based on single circuit.

**STATIC WHITE DRIVER':** Replaceable 120V/277V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 100%-10% standard. Dimming to 1% available. Driver is fully accessible from below the ceiling.

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

### **LUTRON STATIC DRIVER OPTIONS 2,3:**

 LUTES1 (Hi-lume 1% EcoSystem with Soft-On, Fade to Black dimming (LDE1 series))

**TUNABLE WHITE DRIVER** 3: Replaceable LED driver. Driver is accessible from below the ceiling. 120V/277V.

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

#### **LUTRON TUNABLE WHITE DRIVER OPTION 1:**

LUT-TW (0.1% T-Series 2-Channel Digital Tunable White (PSQ Series)).

### **MOUNTING TYPE**

### **HANGING HARDWARE:**

- Pendant: 50" to 300" Fully Adjustable (FA) plated steel aircraft cable with safety stop hardware standard.
- Recessed Spackle Flange: Drywall surfaces (walls or ceilings): 1/4-20 stud and nut (provided by others).
- **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).

**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 prewired with plug-and-play interconnection cables to support easy plug-together joining of fixture runs.

### **OTHER OPTIONS**

**ENDCAPS:** Pendant and Surface Mount: Flat diecast aluminum endcaps add 1/4" to each end of luminaire. Recessed: Flat sheet metal endcaps at each ends adds 1/16" to each end of luminaire.

**CURVED SECTIONS**: Available in 2', 3' & 4' diameters with section lengths of 45°, 90° & 180°. **2D45** and **3D45** curved sections are not available as independent fixtures.

<sup>&</sup>lt;sup>1</sup>Not available on 2D45 & 3D45

Not available on 2D45, 3D45 & 2D90

<sup>&</sup>lt;sup>3</sup> Only available on 3D90, 3D180, 4D90 & 4D180

Submitted by:		Date:	<b>FINELITE</b>
Туре:	Project:		
Ordering Info:			Better Lighting

### **SPECIFICATIONS**

**EMERGENCY STYLE OPTIONS:** Optional Emergency to generator/inverter wiring.

Optional internal generator transfer switch, nightlight wiring, stepdimming driver, backup battery not available for curve sections but can be integrated into straight sections.

# TUNABLE WHITE EMERGENCY OPTIONS: TW Driver Options 4:

O-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 sensors not available for curve sections but can be integrated into straight sections.

**FINISHES:** Finelite Signal White (**SW**) powder coat standard. Finelite Black (RAL9005) with semi gloss fine texture (**FB**) and Satin Aluminum (**SA**) are available. Optional Adders: 179 non-metallic 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 2108 - PoE options available on request, contact factory for more details. These fixtures were 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. 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.

#### WEIGHTS 6:

**Curved Sections:** 

Pendant and Surface Mount: 6 lbs/ft. Recessed (Spackle Flange only): 6.5 lbs/ft.

Linear: 2.8 lbs/ft.

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

<sup>&</sup>lt;sup>4</sup>Consult Finelite for GTD and BB fit

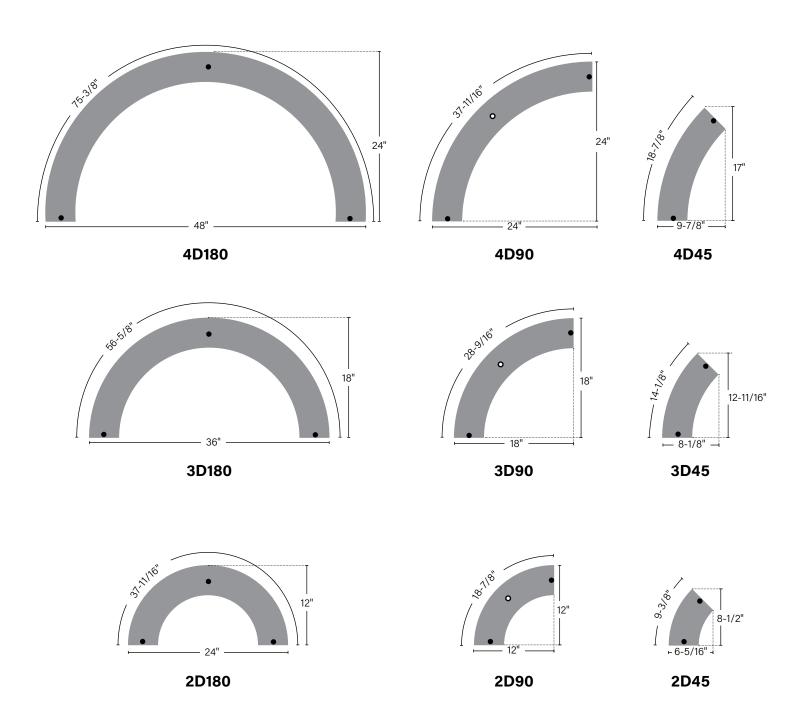
<sup>520</sup> business days lead time for color

<sup>&</sup>lt;sup>6</sup> Excludes Battery Back up and GTD weight

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



# HOUSING CRITICAL DIMENSIONS: PENDANT SHOWN 1



- = Suspension Points
- $\mathbf{o}$  = Additional suspension points for non-standard configurations (see page 8)

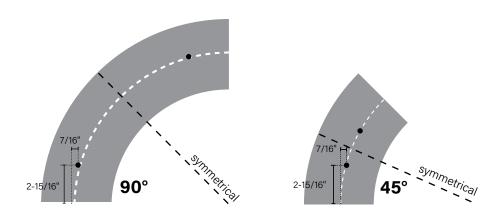
Drawings are not to scale

<sup>1</sup> 2D45 and 3D45 curved sections are not available as independent fixtures

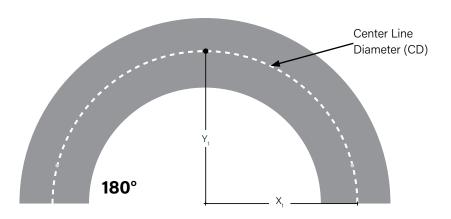
Submitted by:		Date:	FINELITE'
Туре:	oject:		
Ordering Info:			Better Lighting

# **MOUNTING LOCATIONS: RECESSED (SF) AND SURFACE MOUNT**

Mounting locations are located on each end of luminaire with offset shown below.



For 180° Sections: third mounting point required as shown below:



	$X_1 = Y_1$	CD
2D-180	10"	20"
3D-180	16"	32"
4D-180	22"	44"

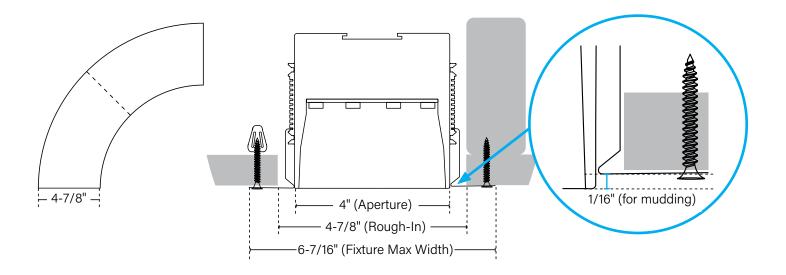
Drawings are not to scale Page 7

Submitted by:		Date:	FINELITE*
Туре:	Project:		
Ordering Info:			Better Lighting

# **ROUGH-IN: RECESSED (SF)**

# Rough-In

Finelite provides a 90°multi-use template for Rough-In accuracy during installation. Template is perforated for use with 45° sections. Must add 3/8" to rough-in distance at endcap locations.



Drawings are not to scale Page 8

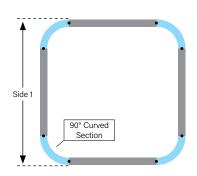
Submitted by:		Date:
Туре:	Project:	
Ordering Info:		

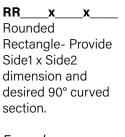


### STANDARD CONFIGURATION EXAMPLES 1, 2

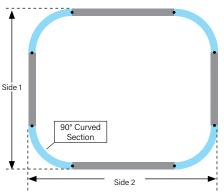
RS\_\_\_x\_ Rounded Square-Provide Side1 dimension and desired 90° curved section.







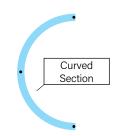




# ARC \_\_\_\_ Arc - Provide desired curved

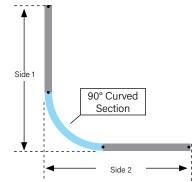
Example -ARC4D180

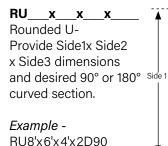
section.

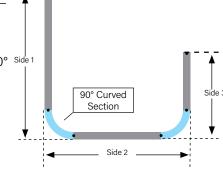


# RL\_\_\_x\_\_\_x Rounded L-Provide Side1x Side2 dimensions and desired 90° curved section.

Example -RL6'x6'x4D90



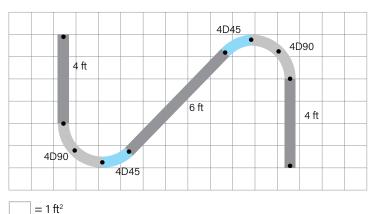




### **99CFG**

Custom Configuration - Please provide a sketch or drawing showing desired linear length dimensions and curved sections. Template available on page 10.

## Example -



### ■ = Suspension Points

<sup>1</sup> Drawings are not to scale

<sup>2</sup> 2' minimum length for linear sections

Page 9

Submitted by:		Date:	FINELITE*
Туре:	Project:		
Ordering Info:			Better Lighting

# **CUSTOM CONFIGURATION TEMPLATE**

 $= 1 ft^2$ 



# Static White Photometry - 4D-90

HP-4-P-D-3' 1-11/16"-V-835

Efficacy: 100 lm/W

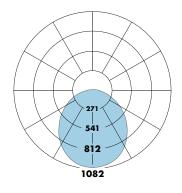
Total luminaire output: 2842 lumens (905 lm/ft)

28.4 watts (9.0 watts/foot 3)

Peak Candela Value: 1082 @ 0°

CRI: 80 CCT: 3500K

ITL LM79 Report 91221



	CANDELA DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0	FLUX
0	1082	1082	1082	1082	1082	
5	1076	1076	1076	1077	1077	102
15	1019	1025	1031	1028	1028	289
25	918	926	940	928	929	458
35	785	796	809	798	792	500
45	638	648	661	649	643	502
55	483	492	502	494	489	441
65	327	333	339	333	329	331
75	177	181	183	182	179	192
85	51	51	51	52	53	58
90	0	0	0	0	0	

Light Output, 3500K, 80 CRI (Lumens Per Foot)				
	S 1	B 1	H1	V <sup>2</sup>
4'	367	462	698	898
3'	419	526	795	1022
2'	377	474	717	922

Power, 3500K (Watts Per Foot) <sup>3</sup>				
	<b>S</b> <sup>1</sup>	B 1	H 1	V <sup>2</sup>
4'	3.5	4.5	6.9	9.0
3'	4.0	5.1	7.8	10.2
2'	3.6	4.6	7.1	9.2

Efficacy, 3500K, 80 CRI (Lumens Per Watt)				
	S 1	B 1	H1	V <sup>2</sup>
4'	105	104	101	100
3'	105	104	101	100
2'	105	104	101	100

### Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI			
3000K	0.985		
3500K	1.000		
4000K	1.032		

Lumen Adjustment Factors 90 CRI			
3000K	0.746		
3500K	0.760		
4000K	0.789		

High Output (H), 2', 4000K, 90 CRI

Lumen Adjustment Factor: 0.789

Total Light Output per Foot: 717  $lm/ft \times 0.789 = 566 lm/ft$ .

Watts/foot: 7.1 W/ft.

Efficacy = 
$$\frac{566 \frac{\text{lm}}{\text{ft.}}}{71 \frac{\text{W}}{4}} = 80 \text{ lm/W}$$

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' Circle, 3500K, Very High Output ( $\mathbf{V}$ ) test - 120V <sup>2</sup> Based on ITL report: 91221

<sup>3</sup> Watts per foot and lumens per foot calculated using approximate outer arc length of 4D90 Curved Section (3 1/8")

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



# 0-10V Tunable White

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

# **TUNABLE WHITE FEATURES**

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

### **TUNABLE WHITE RESTRICTIONS**

• 0-10V TW not available for 2D45, 2D90, 2D180 & 3D45 independant Curved Sections

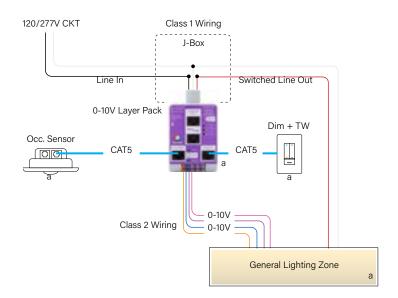
# **PHOTOMETRY**

Apply a power adjustment factor to calculate wattage usage

POWER	CONVERSION FACTOR	
	1.1X	

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

# **WIRING DIAGRAM - DIMMABLE TO 10%**



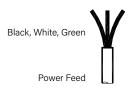
### **Luminaire Wiring**

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

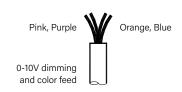
#### Note:

Load or Dim to Off options available.

### **DUAL FEED DETAIL**



WIRING LEGEND			
Black	Hot	Line Voltage	
White	Neutral	Line Voltage	
Green	Ground		



WIRING LEGEND				
Pink	Dimming	0-10V DC		
Purple	Dimming	0-10V DC		
Orange	TW	0-10V DC		
Blue	TW	0-10V DC		

