Project:

Date

FINELITE<sup>®</sup> Better Lighting

## High Performance 4" Aperture (HP-4) Curved Sections

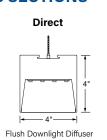


High Performance 4" Aperture Curved Sections are patented luminaires that add design flexibility to the HP-4 family. Curved Sections deliver continuous illumination and are available in 45°, 90°, and 180° angles with 2', 3', and 4' diameter options. All Curved Sections can be joined to HP-4 linear to 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.

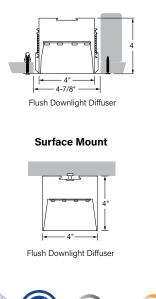
Signal White is standard finish

## **CROSS SECTIONS**

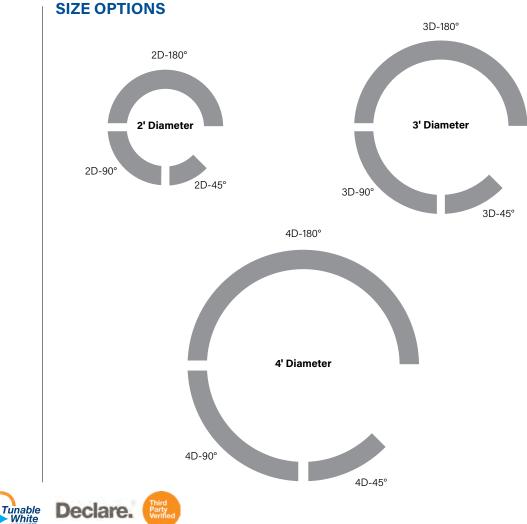




#### **Recessed Spackle Flange**



atic White



Type:

Project:

Date:

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Ordering Info:

## Better Lighting High Performance 4" Aperture (HP-4) Curved Sections

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 (S) 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>	Driver Sele	ction
F - Flush (standard)	96LG - 96 Low Gloss White	120 - 120 Voltage 277 - 277 Voltage 347 - 347 Voltage (OTi only)	SC - Single Circuit	0-10V Driver Options FC-10% - 0-10V 10% (standard) FC-1% - 0-10V 10% OTI-10% - EldoLED OTi, 0-10V 10% <sup>2, 0</sup> OTI-1% - EldoLED OTi, 0-10V 1% <sup>2, 0</sup> ELD-10V-0% - EldoLED SOLOdrive, 0-10V, 0.1% <sup>10</sup> 10V-TW-10% - EldoLED OTi, 0-10V 10% ( <i>Tunable White</i> ) <sup>2, 10</sup> DALI Driver Options FC-DALI-1% - DALI 1% <sup>10</sup> DXL-DALI-1% - EldoLED Dexal, 1% <sup>10</sup> ELD-DALI-0% - EldoLED DUXAL 1% <sup>10</sup> ELD-DALI-1W - EldoLED DUXAL 1% <sup>10</sup> ELD-DALI-1W - EldoLED DUXAL 1% <sup>10</sup>	DMX Driver Options ELD-DMX - EldoLED POWERdrive, 0.1% ELD-DMX-TW - EldoLED POWERdrive, 0.1% (Tunable White) Lutron Driver Options LUT-ES1 - Lutron, Ecosystem 1% <sup>10</sup> LUT-TW - Lutron LD2 Dali-2 1% ( <i>Tunable White</i> ) <sup>11</sup> 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>®</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	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 "				
CP - Chicago Plenum <sup>5</sup> RLA - Red List Approved RLD - Red List Declared	RSX           RRX           RLX           RUX           ARC Arc (           99CFG - Custom Config	- Rounded Square (side 1 x curve section)  x - Rounded Rectangle (side 1 x side 2 x curve section)  x - Rounded " L " Shape (side 1 x side 2 x curve section)  x - Rounded " U " Shape (side 1 x side 2	3 x curve section)		
Lead times is 8-weeks.					
<ul> <li><sup>1</sup> Contact factory for switching options</li> <li><sup>2</sup> Add DTO to gain "Dim to Off" functionality (FC-10% - DTO, FC-1% - DTO)</li> <li><sup>3</sup> B &amp; V outputs only</li> <li><sup>4</sup> Pendant only</li> <li><sup>5</sup> Recessed and Pendant (Only available with C1, C2, and C3 mounting hardware with Finelite Gridbox)</li> </ul>		<ul> <li><sup>6</sup> For Pendant and Surface Mount only</li> <li><sup>7</sup> 20 business days lead time for color</li> <li><sup>8</sup> Not available for curved sections but can be integrated into straight sections</li> <li><sup>9</sup> Not available for 2D45 &amp; 3D45</li> <li><sup>10</sup> Not available for 2D45, 2D90, 2D180 &amp; 3D45</li> </ul>	<sup>11</sup> See pages 9-10 for more details and examples <sup>12</sup> Please provide drawing with dimensions		
		www.finelite.com © 2024 FINELITE, INC. ALL RIGHTS RESERVED. V11 CTK0245. 09/24	A brand of		

Due to continuing product improvements, Finelite reserves the right to change specifications without notice. Please visit www.finelite.com for the most current data. Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732

Page 2

Submitted by:	
Туре:	

Better Lighting

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# High Performance 4" Aperture (HP-4) Curved Sections

## 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%1	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)				

DMX Driver Options					
ELD-DMX <sup>3</sup>	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)				
ELD-DMX-16 <sup>3</sup>	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)				
ELD-DMX-TW <sup>3</sup>	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (8 Bit, 2CH - CH1 Warm / CH2 Cool) (Linear)				
ELD-DMX-TW16 <sup>3</sup>	EldoLED POWERdrive, DMX 0.1% Dimming, Tunable White (16 Bit, 4CH - CH1, 2 Warm / CH3, 4 Cool) (Linear)				

Lutron Driver Options					
LUT-ES1 <sup>3</sup>	Lutron, Ecosystem 1% Dimming				
LUT-TW <sup>3</sup>	Lutron LD2 Dali-2 1%, Tunable White				

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

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

<sup>3</sup> Not available for curved sections but can be integrated into straight sections

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

Date

Type: Ordering Info:

High Performance 4" Aperture (HP-4) Curved Sections

## **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;
- DMX: Power 18/3, Control DMX In & Out;
- DALI: Power/Control 18/5;
- LUTRON: Power/Control 18/5

All above feeds are based on single circuit.

DMX and power feed at same location (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

**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%.
- Expected driver lifetime: 100,000 hours.

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

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

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

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

#### LUTRON TUNABLE WHITE DRIVER OPTION 1:

**LUT-TW** - Lutron LD2 Dali-2 1%, Tunable White.

### **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 DMX HANGING HARDWARE:** For grid ceiling applications the dual GridBox<sup>™</sup> mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5', 12', and 30' (5' standard).

**TUNABLE WHITE DMX INTERCONNECTION CABLES:** Luminaires are prewired with plug-and-play interconnected cables to support easy plug-together joining of fixture runs. DMX to RJ45 adapters and an RJ45 terminator for every 32 DMX drivers are included.

### **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>1</sup> Not available on 2D45 & 3D45 <sup>2</sup> Not available on 2D45, 3D45 & 2D90

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

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# High Performance 4" Aperture (HP-4) Curved Sections

## **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<sup>4:</sup>

- 0-10V: EM/GEN, GTD or Battery Back Up
- DMX: 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.

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#### WEIGHTS 6:

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

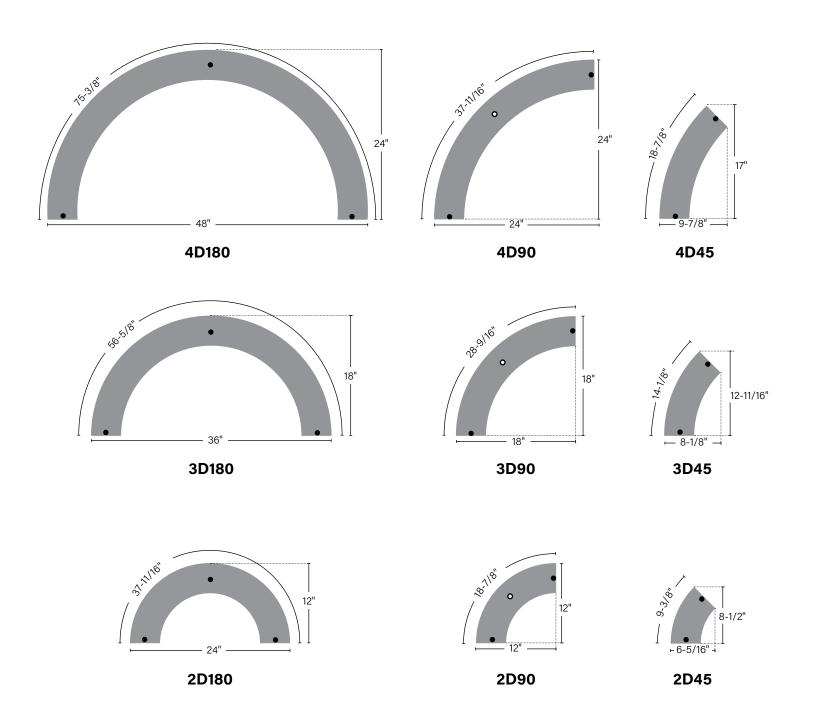
Linear: 2.8 lbs/ft.

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

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Ordering Info:			Better Lighting

High Performance 4" Aperture (HP-4) Curved Sections

## HOUSING CRITICAL DIMENSIONS: PENDANT SHOWN <sup>1</sup>



• = Suspension Points

• = 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

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Туре:	Project:

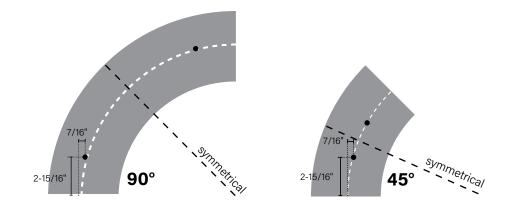
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## **Better Lighting** High Performance 4" Aperture (HP-4) Curved Sections

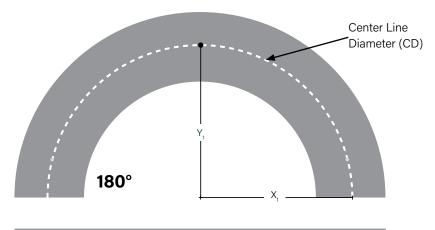
Date:

## **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

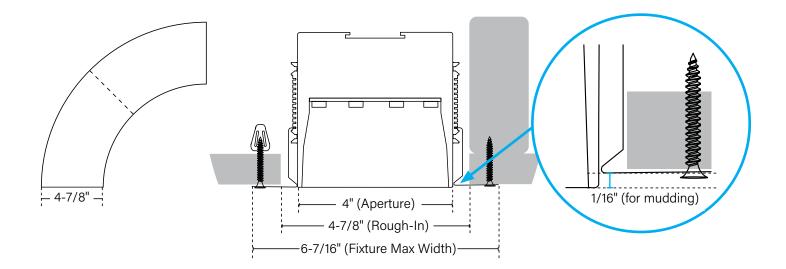
Submitted by:		Date:	FINELITE
Туре:	Project:		
Ordering Info:	·		Better Lighting

# High Performance 4" Aperture (HP-4) Curved Sections

## **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.

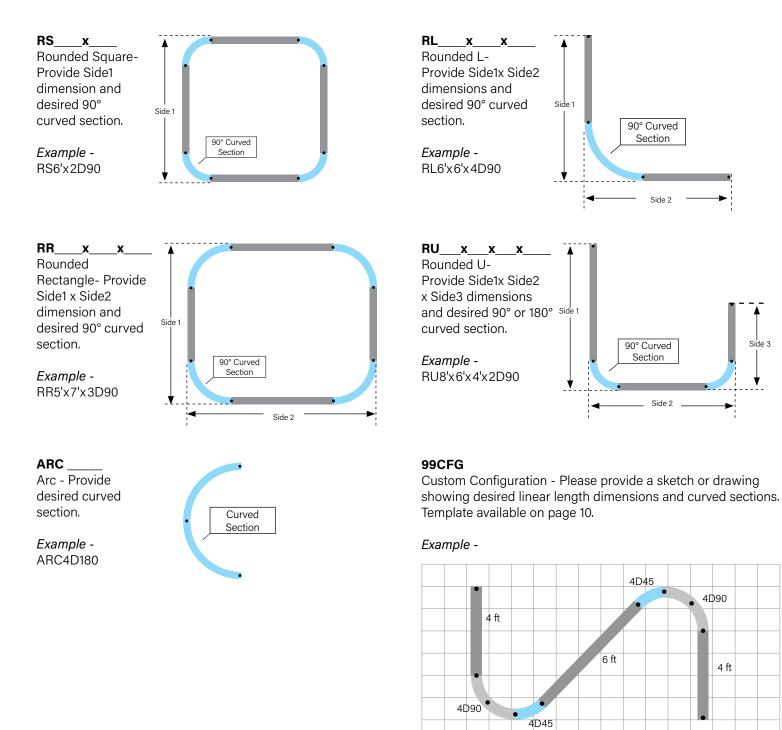


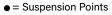
Submitted by	/:
Type:	

**FINELITE Better Lighting** 

High Performance 4" Aperture (HP-4) Curved Sections

## **STANDARD CONFIGURATION EXAMPLES 1, 2**





<sup>1</sup> Drawings are not to scale <sup>2</sup> 2' minimum length for linear sections

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 $= 1 \, \text{ft}^2$ 

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4090

4 ft

Side 3

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High Performance 4" Aperture (HP-4) Curved Sections

## **CUSTOM CONFIGURATION TEMPLATE**

= 1 ft	-2										

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High Performance 4" Aperture (HP-4) Curved Sections

## 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 <sup>3</sup>) Peak Candela Value: 1082 @ 0° CRI: 80 CCT: 3500K

**S**<sup>1</sup>

367

419

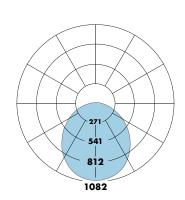
377



4'

3'

2'



		CAND		TRIBUTI		
	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	

Sample Lumen Adjustment Calculation

(Lumen	s Per Foot)		Lumen Adjustme	ent Factors 80 CRI
	H 1	<b>V</b> <sup>2</sup>	3000K	0.985
	698	898	3500K	1.000
	795	1022	4000K	1.032
	717	922		·

	Powe	r, 3500K (Watts Per F	oot) <sup>3</sup>	
	S <sup>1</sup>	B <sup>1</sup>	H1	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

**B**<sup>1</sup>

462

526

474

Light Output, 3500K, 80 CRI (

	Efficacy, 35	600K, 80 CRI (Lumen	s Per Watt)	
	S 1	B <sup>1</sup>	H1	V <sup>2</sup>
4'	105	104	101	100
3'	105	104	101	100
2'	105	104	101	100

3500K	1.000
4000K	1.032
Lumen Adjustme	nt Factors 90 CRI
Lumen Adjustme 3000K	nt Factors 90 CRI 0.746

0.789

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

Lumen Adjustment Factor: 0.789

4000K

Total Light Output per Foot: 717 lm/ft x 0.789 = 566 lm/ft. Watts/foot: 7.1 W/ft.

$$\mathbf{Efficacy} = \frac{\frac{566}{ft.}}{\frac{ft}{ft.}} = 80 \text{ Im/W}$$

— 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 (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")

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## 0-10V Tunable White

Finelite's 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 6500K
- Dimming Range: 100% to 10%
- CRI Options: 80 CRI or 90 CRI

Note: Dim to Off options available.

## **TUNABLE WHITE RESTRICTIONS**

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

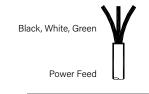
## **PHOTOMETRY**

Apply a power adjustment factor to calculate wattage usage

POWER	CONVERSION FACTOR	
	1.1X	

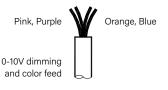
(Example: a 50 watt luminaire in static white would draw 55 watts using 0-10V Tunable White)

## **DUAL FEED DETAIL**



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

æ



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

