





# **Features**

The FINCH family of cylinders with a 1" aperture, features exceptional output, flexibility, and a broad range of configurations to provide discreet quality illumination while integrating into the architecture. It is available in a fixed downlight, adjustable (with 50° tilt), wall mount and even exterior ground mount options. Whether installed on ceilings, walls/mullions or the ground, the FINCH family blends seamlessly into its surroundings.

The FINCH surface downlight cylinder is available in lengths from 3" to 18", up to 1500 lm output and has a choice of beveled front door options for additional shielding. Use alone or in a composition to create a unique design.

# **Product Overview**

Type: Surface Mount, Direct

Wattage: 6W, 8W, 10W, 12W, 15W, 17W, 20W
Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K

CRI: 80+ & 90+ typ.

Dimming: 0-10V, DALI, TRIAC/ELV, Lutron EcoSystem

# **PROJECT:**

# TYPE:

# **Performance Data**

Watts	Lumens	LPW	CCT	CRI
6	643	102.1	3000K	80+
8	787	93.7	3000K	80+
10	927	88.3	3000K	80+
12	1065	83.9	3000K	80+
15	1200	79.9	3000K	80+
17	1331	76.9	3000K	80+
20	1459	73.9	3000K	80+

Data is based on 9" cylinder with 20W, flood optic, standard bevel, 3000K, 80+, 120V IES file available on website. Consult ordering information and data for other wattages & beam spreads.

## **Electrical Data**

277V

	6	W	8	W	10	W	12	:W
	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps
120V	6.3	0.054	8.4	0.071	10.5	0.088	12.7	0.107
277V	6.7	0.034	8.6	0.038	10.7	0.044	12.8	0.051
	15	W	17	W	20	W		
	Watts	Amps	Watts	Amps	Watts	Amps		
120V	14.9	0.125	17.3	0.144	19.7	0.164		

0.065

Electronic constant current LED driver

0.058

17.3

15





19.6

0.073



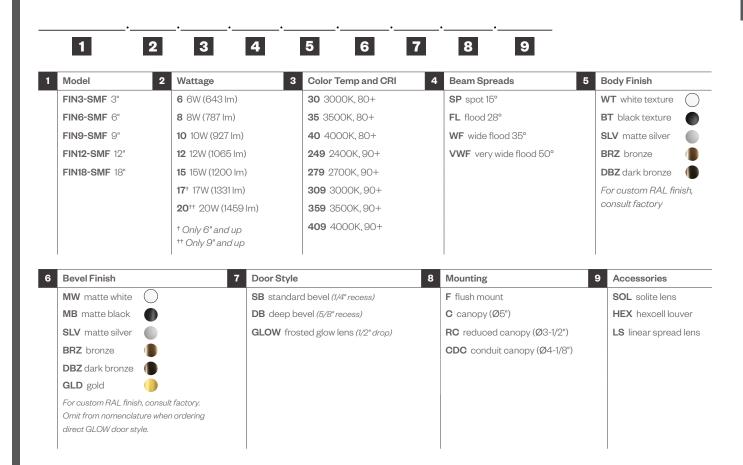


PROJECT: TYPE:

To Order, please specify <u>both</u> the light fixture and remote driver.

Fixture Example: FIN9-SMF.12.309.WF.BT.GLD.DB.RC.SOL Remote Driver Example: FINPW.12.0-10V.MP

# STEP 1: 1" Surface Mount (with Remote Driver) Ordering Information



## **STEP 2: Remote Driver Ordering Information**

Amerlux offers a mounting plate for each remote driver with accessories for mounting in enclosure by others, or a single remote box for one driver (**RBX**), or a single remote box that can fit two drivers (**RBX2**). Electrical Contractor (EC) is responsible for adherence to all local codes.

I	2 3	·	
Model	2 Wattage	3 Drivers/Controls	4 Driver Enclosure
FINPW	<b>6</b> 6W (643 lm)	<b>0-10V</b> 0-10V dimming, 1%, 120/277VAC	MP mounting plate (1 driver
	8 8W (787 lm)	DALI DALI dimming, 1%, 120/277VAC	RBX remote box (1 driver)
	<b>10</b> 10W (927 lm)	LE/TE TRIAC/ELV dimming, 5%, 120/277VAC	RBX2 remote box (2 driver
	<b>12</b> 12W (1065 lm)	HILUME-H-ECO Lutron LDE1 Hi-lume® 1% Soft-On/	Note: One wattage & dimming
	<b>15</b> 15W (1200 lm)	Fade-to-Black, 120/277VAC (10W min)	protocol per box.
	<b>17</b> 17W (1331 lm)		
	<b>20</b> 20W (1459 lm)		



PROJECT: TYPE:

# **Specifications**

## Application

Retail, commercial and hospitality ambient/task lighting

#### Construction

Extruded aluminum precision machined body, door & heatsink

#### Optical

TIR optics

Beam Spreads: Spot 15°, Flood 28°, Wide Flood 35°, Very Wide Flood 50°

## LED

Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K CRI: 80+ & 90+ typ.

R9 Values: 11 (83 CRI), 55 (92 CRI) Binning: 3 MacAdam (SDCM)

Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

## Electrical

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

#### Finish

Powder coat paint

Consult factory for custom finishes

## Mounting

Surface mount

#### Certifications

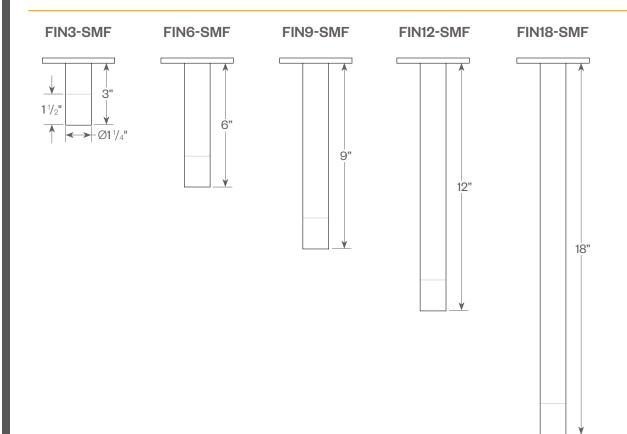
CSA tested to UL standards

Indoor use only

Damp location

## Warranty

5 year limited warranty





PROJECT: TYPE:

# **Junction Box Mounting Requirements**

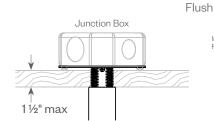


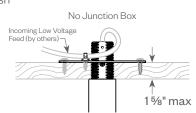
Canopy (C) & Conduit Canopy (CDC) Mounts Require 4" Octagonal Junction Box (by others)

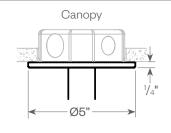


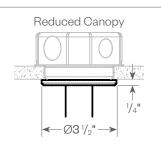
Reduced Canopy (RC) Mounts also Require Raised Cover (by others) for 4" Octagonal Junction Box

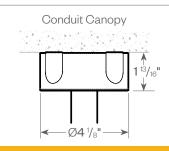
# **Mounting Options**



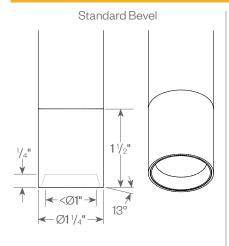


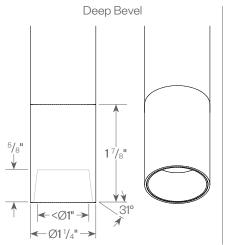


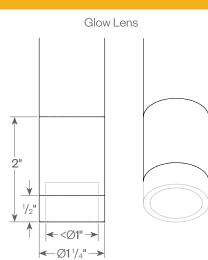




## **Door Styles**







# **Finish Options**

Powder coat paint. Consult factory for custom finishes.

















White Texture Black Texture

Available for Bevel Finish only





PROJECT: TYPE:

## **Performance Data**

## **MULTIPLYING FACTORS:**

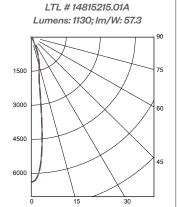
Wattage:	6W	8W	10W	12W	15W	17W	20W
Factor:	0.44	0.54	0.64	0.73	0.82	0.91	1.0

CCT:	3000K,80+	3500K,80+	4000K, 80+	2400K, 90+	2700K, 90+	3000K,90+	3500K, 90+	4000K,90+
Factor:	1.0	1.04	1.06	0.76	0.83	0.88	0.92	0.93

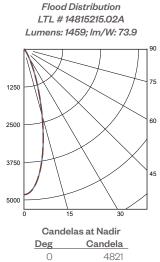
Multiplying Factor is based on 3000K, 80+120V IES file on website.

# 20W, Standard Bevel, 3000K, 80+

Spot Distribution

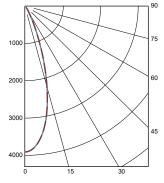






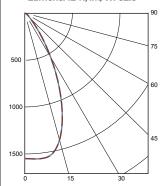
Deg	Candela
0	4821
5	4439
15	2154
25	608
35	155
45	52





Candelas at Nadir				
Deg	Candela			
0	3908			
5	3714			
15	2269			
25	632			
35	144			
45	46			

Very Wide Flood Distribution LTL # 14815215.04A Lumens: 1241; Im/W: 62.9



Candelas at Nadir			
Candela			
1549			
1558			
1394			
821			
303			
90			

# Application Data:

## Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

 $\textbf{D} {=} \mathsf{Distance} \ \mathsf{to} \ \mathsf{floor} \ \mathsf{or} \ \mathsf{wall}.$ 

**FC**=Footcandles on floor or wall at center beam aiming location.

L=Effective Visual Beam length in feet (50% of maximum footcandle level).

W=Effective Visual Beam width in feet (50% of maximum footcandle level).

CB = Distance across or down to center beam location.



	Spot						
		Aiming Horizor ootcan	ntal				
D	FC	L	W				
5.0'	158	1.9	1.9				
7.5'	91	2.5	2.5				
10.0'	57	3.0	3.0				
12.5'	38	3.5	3.5				

	FI	ood			
		0° Aiming Angle Horizontal Footcandles			
D	FC	L	W		
5.0'	178	2.6	2.6		
7.5'	85	3.6	3.6		
10.0'	49	4.7	4.7		
12.5'	31	58	58		

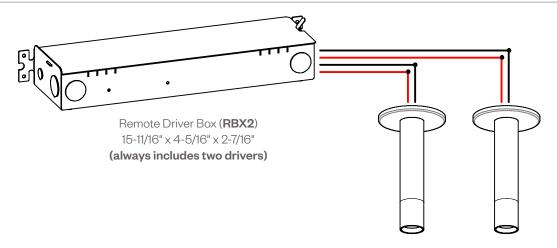
Wide Flood					
	0° Aiming Angle Horizontal Footcandles				
D	FC	L	W		
5.0'	138	3.0	3.0		
7.5'	66	4.3	4.3		
10.0'	38	5.6	5.6		
	25	7.0	7.0		

Very Wide Flood  O° Aiming Angle  Horizontal  Footcandles					
D	FC	L	W		
5.0'	61	4.2	4.2		
7.5'	27	6.3	6.3		
10.0'	16	8.4	8.4		
12.5'	10	10.6	10.6		



PROJECT: TYPE:

# Remote Driver w/Mounting Plate 4" Square Junction Box (by others) Remote Driver w/Mounting Plate 4" Square Junction Box (by others)



## Please see the example below when choosing the remote driver mounting or enclosure.

With 10 Finch Cylinders, (fixed, adjustable, Wall Direct or Indirect) would be: 10 FINPW-MP, or 10 FINPW-RBX1, or 5 FINPW-RBX2



PROJECT: TYPE:

# **Dimming Compatibility**

Amerlux® Finch fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

## --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

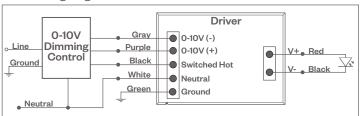
## 0-10V - DIMMING

Integrates into a variety of building management and daylighting controls

## Notes:

- 120VAC or 277VAC
- · Dims down to 1% light output
- · Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

## 0-10V Wiring Diagram



## Compatible Dimmers<sup>†</sup>:

Wall Box		Central System
Lutron "Diva" - DVSTV	Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface

## **DALI DIMMING**

Digital control protocol allows individual fixture control

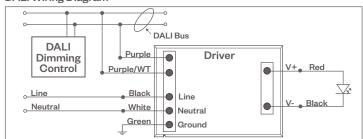
#### Notes

- 120VAC or 277VAC
- · Dims down to 1% light output in most cases

# Compatible Dimmers<sup>†</sup>:

Wall Box (3-Wire Fluorescent)	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

## **DALI Wiring Diagram**



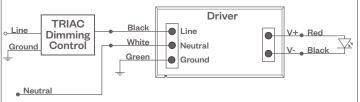
## TRIAC (Forward Phase) DIMMING (Standard)

Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

## Notes:

- 120VAC or 277VAC\*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

# TRIAC Wiring Diagram



## Compatible Dimmers<sup>†</sup>:

Wall Box (TRIAC 120VAC)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Skylark"	

## Notes:

- \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.



PROJECT: TYPE:

# **Dimming Compatibility** (continued)

Amerlux® Finch fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

## --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

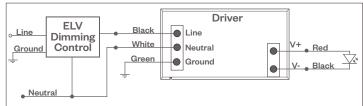
## ELV - Electronic Low Voltage (Reverse Phase) DIMMING

Utilizes specialized "ELV" dimmers.

#### Notes:

- 120VAC or 277VAC\*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions DO NOT SHARE NEUTRALS!
- · Must meet dimmer Minimum Load Requirements

# **ELV Wiring Diagram**



## Compatible Dimmers†:

Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Maestro"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

## **LUTRON LDE1 DIMMING**

Integrates into Lutron EcoSystem building management

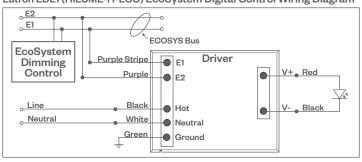
# Notes:

- 120VAC or 277VAC\*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions DO NOT SHARE NEUTRALS!

## Compatible Dimmers<sup>†</sup>:

Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem
Energi Savr Node	compatible controls
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

## Lutron LDE1 (HILUME-H-ECO) EcoSystem Digital Control Wiring Diagram



## Notes:

- \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.