



PROJECT: TYPE:

# **Features**

The FINCH family of recessed downlights with a 1" aperture, features exceptional output, and a broad range of configurations to provide discreet quality illumination while integrating into the architecture. It is available in fixed, adjustable (30° tilt) and wall wash. Round or square, trimmed, trimless or millwork and is serviceable from below.

The FINCH recessed downlight can be coupled with the surface cylinder to create a broader composition and a unique design.



# **Product Overview**

Type: Recessed Square Downlight

Wattage: 6W, 8W, 10W, 12W

Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K

CRI: 80+ or 90+ typ.

Dimming: 0-10V, DALI, TRIAC/ELV, Hi-lume®

# **Certifications**





# **Fixture Summary**

# **Performance Data**

Watts	Delivered Lumens	LPW	Color Temp	CRI
6	667	115	3000K	+08
8	823	100.4	3000K	+08
10	979	95	3000K	80+
12	1112	87.1	3000K	+08

Data is based on Wide Flood optics, 120V, 3000K, 80+ IES files available on website.

# **Electrical Data**

	6W		8W		10W		12W	
Voltage	System Watts	Amps						
120V	5.8	0.05	8.2	0.06	10.3	0.08	12.7	0.10
277V	6.2	0.03	8.5	0.04	10.4	0.04	12.6	0.05

Electronic constant current LED driver.

Data is based on tests using TRIAC/ELV (LE/TE) driver.





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# 1" Recessed Square Downlight Housing/Frame Ordering Information

1 2 3

1 Model

FIN-SD-NC (non-IC)

FIN-SD-CP (Chicago Plenum (CCEA), 10W max)

FIN-SD-IC (Insulated Ceiling/air tight, 10W max)

2 Style

T trimmed

TL trimless

**MWK** millwork

Options/Accessories

HB49 - hanger bars from min 29" to max 49"

Note: 26" hanger bars are included as standard.

Choose **HB49** option above for larger mounting spaces only.

# 1" Recessed Square Downlight Trim Ordering Information

1 2 3 4 5 6 1 Model 2 Style 3 Finish

FIN-SS downlight
FIN-SSHW shower (available for use with trimmed (T) style only)

T trimmed
TL trimless
MWK millwork

Trimmed
MBW matte black, white flange
MWW matte white, white flange
SLVW matte silver, white flange
MBB matte black, black flange
SLVS matte silver, silver flange

\_\_\_\_ other (RAL#, consult factory for lead time) Trimless/Millwork \$
MB matte black F
MW matte white \( \)

\_\_\_\_ other
(RAL#, consult factory
for lead time)

**SLV** matte silver

SP spot, 18°
FL flood, 28°
WF wide flood, 34°
VWF very wide flood, 52°

5 Color Temp and CRI

80+ CRI 90+ CRI

**30** 3000K, 80+ **249** 2400K, 90+ **35** 3500K, 80+ **279** 2700K, 90+

**40** 4000K, 80+ **309** 3000K, 90+

**359** 3500K, 90+ **409** 4000K, 90+

6 Options/Accessories

**SOL** solite beam softening lens (comes standard with RSHW trim)

**HEX** hexcell louver (not available for use with RSHW trim)

LS linear spread lens 10°x60°

# **Remote Driver Ordering Information**

1 2 3 4

1 Model 2 Wattage FINPW 6 6 6W (623 lm) 8 8W (789 lm) 10 10W (914 lm) 12 12W (1039 lm) 3 Driver

**0-10V** 0-10V dimming, 1% dim, 120/277VAC

**DALI** DALI dimming, 1% dim, 120/277VAC **LE/TE** TRIAC/ELV dimming, 5% dim, 120/277VAC

**HILUME-H-ECO** - Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black, 120/277VAC (for use with 10W & 12W only)

4 Driver Enclosure Options

**MP** mounting plate (standard)

RBX remote box (1 driver)

RBX2 remote box (2 drivers)





# PROJECT:

# TYPE:

# **Specifications**

# Construction

Galvanized steel frame

Galvanized steel splice housing and hanger brackets

Screwless plaster frame with perforated face for easier installation

(for trimless version only)
Aluminum heatsink

Die-cast aluminum trim

### Optical

Beam Spreads: Spot 18°, Flood 28°, Wide Flood 34°, Very Wide Flood 52°, Linear Spread 10°x60°

### **LED**

Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K

CRI: 80+ typ (3000K, 3500K, 4000K)

90+ typ. (2400K, 2700K, 3000K, 3500K, 4000K)

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**

Wattage: 6W, 8W, 10W, 12W

Electronic constant current remote LED driver, 120/277VAC input

### Finish

Powder coat paint/wet paint

Consult factory for custom finishes

### Mounting

26" Hanger bars included.

Optional **HB49** - hanger bars from min 29" to max 49" available.

Trimmed Fixture:

For use in grid or sheetrock ceilings, 1" max ceiling thickness.

Trimless Fixture:

For use in sheetrock ceilings, 1" max ceiling thickness.

Millwork Fixture:

Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material.

1" max ceiling thickness.

### Certifications

CSA tested to UL standards

Indoor use only

Chicago Plenum (optional)

IC/AT rated (optional)

Damp location

### Warranty

5 year limited warranty

# **Finish Options**

Powder coat paint.

Consult factory for custom finishes.



Matte Black



Matte White



Matte Silver

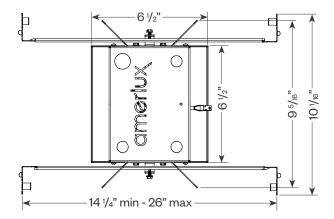


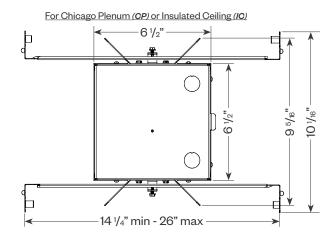


PROJECT: TYPE:

# **Product Details - Trimmed**

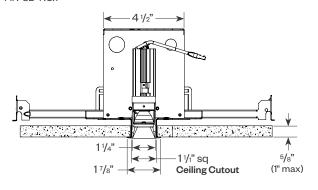
# Housing/Frame

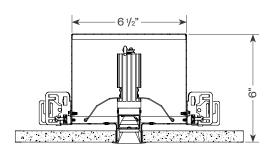




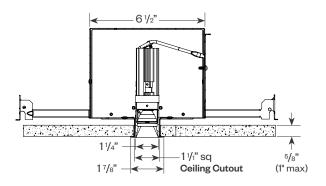
# Trimmed

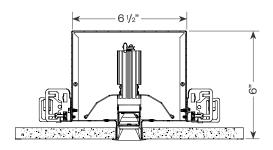
FIN-SD-NC.T





# FIN-SD-CP/IC.T







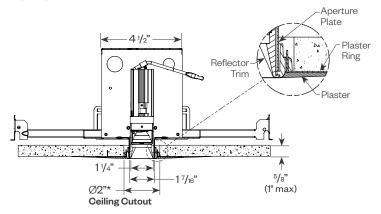


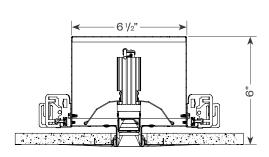
PROJECT: TYPE:

# **Product Details - Trimless and Millwork**

# **Trimless**

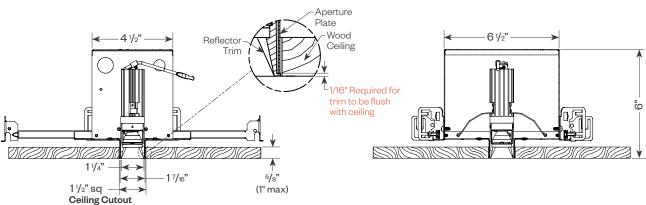
FIN-SD-NC.TL





# Millwork

FIN-SD-NC.MWK

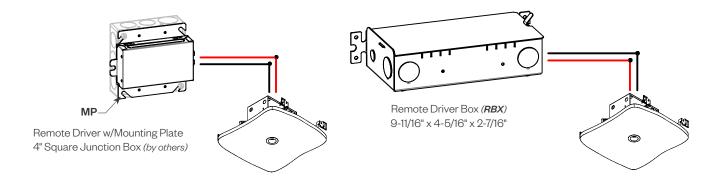


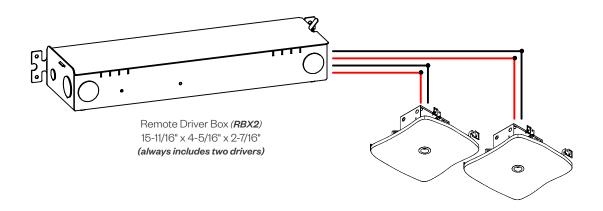
<sup>\*</sup> Note: Round cutout will work for this application.



PROJECT: TYPE:

# **Enclosure Options for Remote Driver**





Note: Maximum remote wiring distance is 100 linear feet of 18 AWG wire and 50 linear feet of 22 AWG wire.





PROJECT: TYPE:

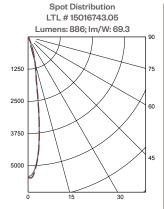
# **Performance Data**

Multiplying Factors: (Multiplying Factor is based on 3000K, 80+, 120V IES file on website)

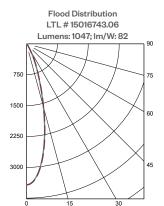
Wattage:	6W	8W	10W	12W
Factor:	0.60	0.74	0.88	1.0

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

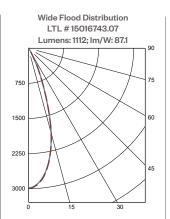
# 12W, 3000K, 80+







Candelas at Nadir		
Deg	Candela	
0	3419	
5	3162	
15	1588	
25	459	
35	68	
45	23	



 Candelas at Nadir

 Deg
 Candela

 0
 2989

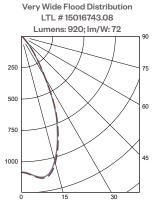
 5
 2847

 15
 1878

 25
 499

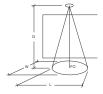
 35
 63

 45
 25



Candelas at Nadir		
Deg	Candela	
0	1083	
5	1113	
15	1026	
25	631	
35	211	
45	54	

# **Application Data**



### Notes and Definitions:

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

**D**=Distance to floor or wall.

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

 $L = \hbox{Effective Visual Beam length in feet (50\% of maximum footcandle level)}. \\ W = \hbox{Effective Visual Beam width in feet (50\% of maximum footcandle level)}.$ 

0° Aiming Angle Horizontal				
<u></u>	FC FC	Footcan L	dles W	
5.0'	148	1.9	1.9	
7.5'	81	2.6	2.6	
10.0'	49	3.2	3.2	
10.5'	22	20	20	

Spot

Flood				
$\triangle$		Aiming Horizor Footcan	ıtal	
D	FC	L	W	
5.0'	115	2.7	2.7	
7.5'	56	3.7	3.7	
10.0'	33	5.0	5.0	
12.5'	21	6.1	6.1	

Wide Flood				
	0° Aiming Angle Horizontal Footcandles			
D	FC	L	W	
5.0'	107	3.0	3.0	
7.5'	50	4.5	4.5	
10.0'	29	5.9	5.9	
12.5'	19	7.3	7.3	

Very Wide Flood				
		Aiming Ai	tal	
D	FC	L	W	
5.0'	44	4.3	4.3	
7.5'	20	6.5	6.5	
10.0'	11	8.6	8.6	
12.5'	7	10.8	10.8	



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 ---

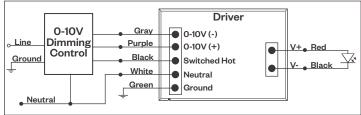
### 0-10V DIMMING

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**

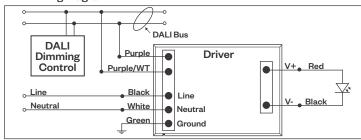
Digital control protocol allows individual fixture control

### Notes:

- 120VAC 277VAC\*
- Dims down to 1% light output in most cases

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

# **DALI Wiring Diagram**



### TRIAC (Forward Phase) DIMMING (Standard)

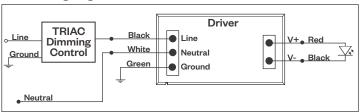
Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

### 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

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

# **TRIAC 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 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** (*Standard*) 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 per dimming manufacturer

# ELV Wiring Diagram Cuine Ground Control White Neutral Driver V+ Neutral

Neutral	Green	

Compatible Dimmers <sup>†</sup> :				
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**

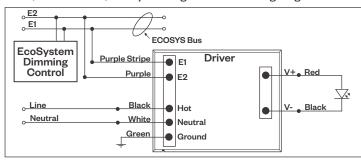
Integrates into Lutron EcoSystem building management

# Notes:

- 120VAC or 277VAC\*
- Dims down to 1% light output
- 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 compatible controls	
Energi Savr Node		
Grafik Eye QS/Homeworks		
QS Control Unit		
Quantum Hub		
Homeworks QS/My Room		

# 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 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.

