

# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

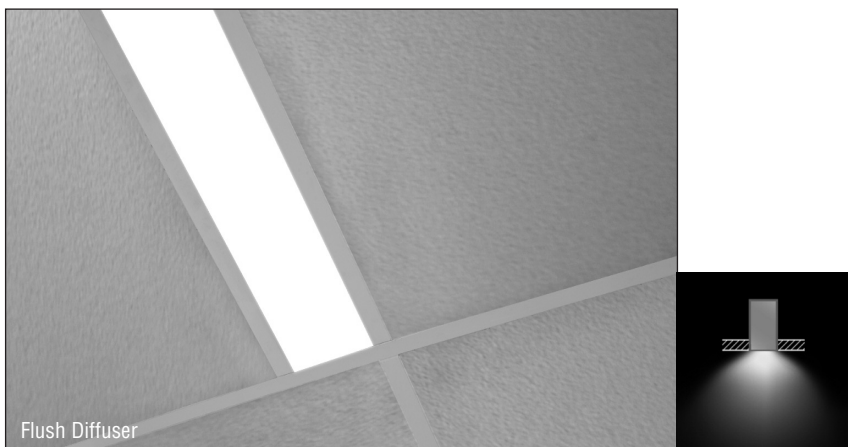


Date

Project

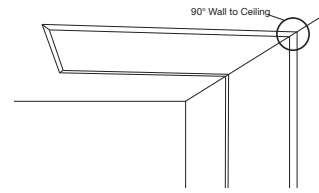
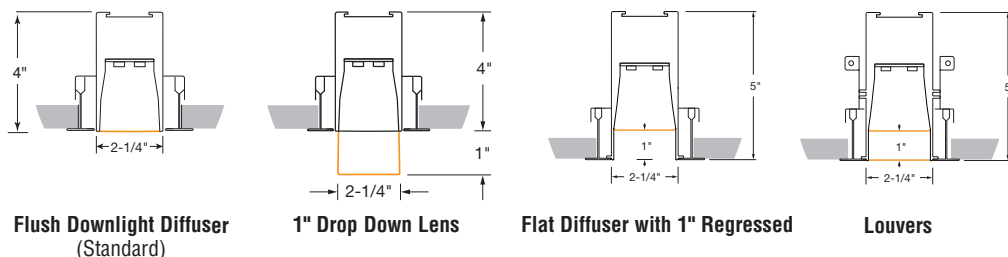
Type

Comments



### DESCRIPTION

High Performance 2" Aperture Recessed (HP-2 R) is a patented, linear recessed LED luminaire that offers many aesthetic options including Flush, 1" Drop Down Lens, White Cross Blade Baffle, Hollowed Ellipse Louver, Hex Louver, and Regressed diffuser. HP-2 R delivers excellent performance using an advanced optical design and mid-power LEDs to achieve 90% of initial light output at 100,000+ hours.

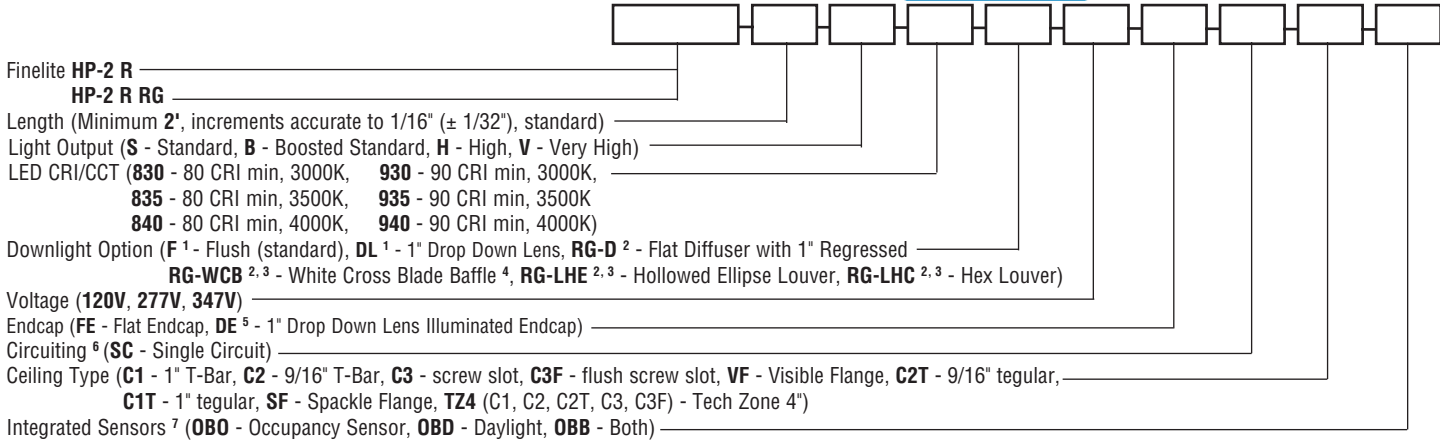


**MITERED ANGLES**  
Illuminated 90° corners and wall-to-ceiling configuration are seamless without socket shadows. Custom angles are available (90° minimum on inside corners). Contact factory.

### AESTHETIC SOLUTIONS

Offering multiple diffuser options with Flush, 1" Drop Down Lens, Louvers, and Regressed for a desired aesthetic.

**ORDERING GUIDE:** Sample Number: HP-2 R - 32' - S - 835 - F - 120V - FE - SC - C1 - OBO [GET A QUOTE >](#)



<sup>1</sup> Available for HP-2 Recessed only (HP-2 R)  
<sup>2</sup> Available for HP-2 Recessed Regressed only (HP-2 R-RG)  
<sup>3</sup> Available in 1" increments  
<sup>4</sup> Currently not advisable for drywall  
<sup>5</sup> Available for 1" Drop Down Lens (DL) downlight option only  
<sup>6</sup> Contact factory for switching options  
<sup>7</sup> Available with Flush (F), White Cross Blade Baffle (WCB), and Regressed (RG) downlight diffusers

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732; D727,554 S; D727,550 S, D727,551 S A brand of Legrand

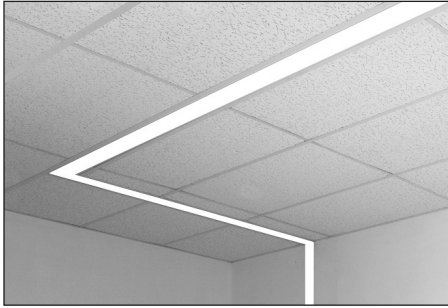
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# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

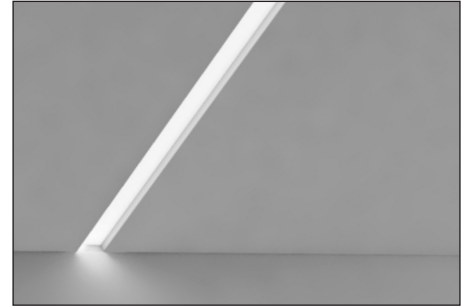
### AESTHETIC OPTIONS



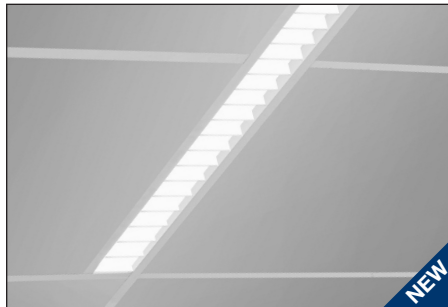
Flat Diffuser (F)



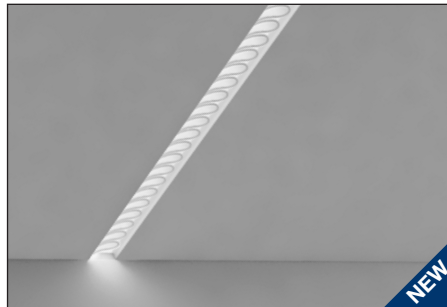
1" Drop Down Lens (DL)



Flat Diffuser with 1" Regressed (RG-D)



White Cross Blade Baffle (RG-WCB)\*



Hollowed Ellipse Louver (RG-LHE)



Hex Louver (RG-LHC)

\* White Cross Blade Baffle (WCB) currently not advisable for drywall

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732; D727,554 S; D727,550 S, D727,551 S

A brand of Legrand

# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

### PHOTOMETRY

#### DOWNLIGHT: FLUSH DIFFUSER

HP-2-D-V-835

Very High Output - 4' Luminaire

Efficacy: 89 lumens per watt

Total luminaire output: 3287 lumens (822 lumens/foot)

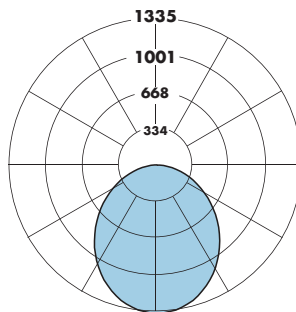
36.9 watts (9.2 watts/foot)

Peak Candela Value: 1335 @ 0°

CCT: 3500K

CRI: 80

ITL LM79 Report 85135



CANDELA DISTRIBUTION

	0.0	22.5	45	67.5	90	Flux
0	1335	1335	1335	1335	1335	
5	1327	1326	1325	1325	1324	126
15	1264	1254	1255	1248	1242	353
25	1138	1122	1116	1100	1090	512
35	967	951	937	915	904	585
45	773	760	742	719	711	572
55	575	565	549	529	522	491
65	386	379	368	354	350	365
75	214	209	203	197	196	216
85	65	63	61	60	60	69
90	0	0	0	0	0	

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

S*	B*	H*	V**
1346	1692	2557	3287

#### Lumen Adjustment Factors - 80 CRI

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

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

S*	B*	H*	V**
336	423	639	822

#### Lumen Adjustment Factors - 90 CRI

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

#### Power, 3500K, 80 CRI (Watts Per Foot)

S*	B*	H*	V**
3.6	4.6	7.1	9.2

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

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

S*	B*	H*	V**
93	92	90	89

#### SAMPLE LUMEN ADJUSTMENT CALCULATION

High Output (H), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

$$\text{Total Light Output} = 2557 \text{ lm} \times 0.789 = 2017 \text{ lm}$$

$$\text{Total Light Output per Foot} = 639 \text{ lm/ft} \times 0.789 = 504 \text{ lm/ft}$$

$$\text{watts/foot} = 7.1 \text{ W/ft}$$

$$\text{Efficacy} = \frac{504 \frac{\text{lm}}{\text{ft}}}{7.1 \frac{\text{W}}{\text{ft}}} = 71 \text{ lm/W}$$

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

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 85135

# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

### PHOTOMETRY

#### DOWNLIGHT: 1" DROP DOWN LENS

HP-2- D-V-835-DL

Very High Output - 4' Luminaire

Efficacy: 99 lumens per watt

Total luminaire output: 3637 lumens (909 lumens/foot)

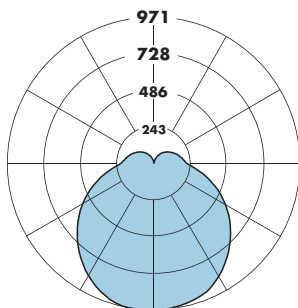
36.8 watts (9.2 watts/foot)

Peak Candela Value: 969 @ 0°

CCT: 3500K

CRI: 80

ITL LM79 Report 90630



CANDELA DISTRIBUTION

	0.0	22.5	45	67.5	90	Flux
0	969	969	969	969	969	969
5	964	965	967	970	971	92
15	921	925	944	955	957	265
25	833	848	880	895	900	402
35	718	745	788	808	814	486
45	586	627	677	705	714	513
55	445	497	556	591	603	485
65	301	362	427	468	483	409
75	159	226	298	344	361	299
85	43	112	187	235	252	189
90	11	78	150	198	213	
95	10	73	141	185	199	137
105	9	61	123	162	175	116
115	7	50	105	139	151	92
125	5	38	85	115	125	68
135	3	26	64	90	99	45
145	2	15	42	65	72	25
155	1	7	22	38	44	11
165	1	2	8	13	18	2
175	0	0	0	0	0	0
180	0	0	0	0	0	0

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

S*	B*	H*	V**
1489	1872	2829	3637

#### Lumen Adjustment Factors - 80 CRI

3000K	0.985
3500K	1.000
4000K	1.032

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

S*	B*	H*	V**
372	468	707	909

#### Lumen Adjustment Factors - 90 CRI

3000K	0.746
3500K	0.760
4000K	0.789

#### Power, 3500K, 80 CRI (Watts Per Foot)

S*	B*	H*	V**
3.6	4.6	7.1	9.2

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

#### SAMPLE LUMEN ADJUSTMENT CALCULATION

High Output (H), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

$$\text{Total Light Output} = 2829 \text{ lm} \times 0.789 = 2232 \text{ lm}$$

$$\text{Total Light Output per Foot} = 707 \text{ lm/ft} \times 0.789 = 558 \text{ lm/ft}$$

$$\text{watts/foot} = 7.1 \text{ W/ft}$$

$$\text{Efficacy} = \frac{558 \frac{\text{lm}}{\text{ft}}}{7.1 \frac{\text{W}}{\text{ft}}} = 79 \text{ lm/W}$$

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

S*	B*	H*	V**
103	102	100	99

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

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 90630

# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

### PHOTOMETRY

#### DOWNLIGHT: REGRESSED DIFFUSER

HP-2-R-RG-V-835

Very High Output - 4' Luminaire

Efficacy: 79 lumens per watt

Total luminaire output: 2907 lumens (727 lumens/foot)

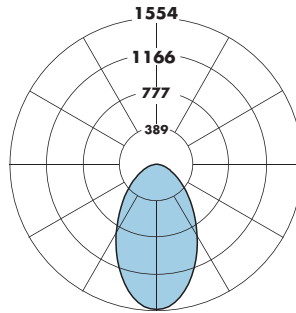
37 watts (9.3 watts/foot)

Peak Candela Value: 1554 @ 0°

CCT: 3500K

CRI: 80

ITL LM79 Report 90351



CANDELA DISTRIBUTION

	0.0	22.5	45	67.5	90	Flux
0	1554	1554	1554	1554	1554	1554
5	1543	1542	1536	1530	1529	145
15	1467	1436	1389	1343	1324	390
25	1314	1245	1143	1055	1023	530
35	1105	1007	866	759	722	554
45	867	755	609	512	481	492
55	629	518	389	321	303	380
65	407	310	218	178	172	249
75	211	139	103	95	94	131
85	54	32	27	26	26	36
90	0	0	0	0	0	0

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

S*	B*	H*	V**
1190	1496	2261	2907

#### Lumen Adjustment Factors - 80 CRI

3000K	0.985
3500K	1.000
4000K	1.032

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

S*	B*	H*	V**
298	374	565	727

#### Lumen Adjustment Factors - 90 CRI

3000K	0.746
3500K	0.760
4000K	0.789

#### Power, 3500K, 80 CRI (Watts Per Foot)

S*	B*	H*	V**
3.6	4.6	7.1	9.3

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

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

S*	B*	H*	V**
82	81	80	79

#### SAMPLE LUMEN ADJUSTMENT CALCULATION

High Output (H), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

$$\text{Total Light Output} = 2261 \text{ lm} \times 0.789 = 1784 \text{ lm}$$

$$\text{Total Light Output per Foot} = 565 \text{ lm/ft} \times 0.789 = 446 \text{ lm/ft}$$

$$\text{watts/foot} = 7.1 \text{ W/ft}$$

$$\text{Efficacy} = \frac{446 \frac{\text{lm}}{\text{ft}}}{7.1 \frac{\text{W}}{\text{ft}}} = 63 \text{ lm/W}$$

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

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 90351

# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

### PHOTOMETRY

**DOWNLIGHT:** WHITE CROSS BLADE BAFFLE

HP-2-D-RG-V-835-WCB

Very High Output - 4' Luminaire

Efficacy: 59 lumens per watt

Total luminaire output: 2169 lumens (542 lumens/foot)

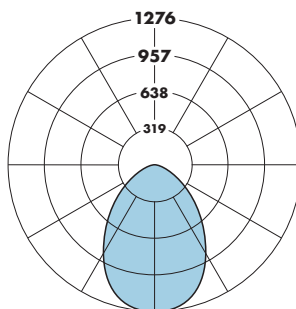
36.5 watts (9.1 watts/foot)

Peak Candela Value: 1276 @ 0°

CCT: 3500K

CRI: 80

ITL LM79 Report 91551



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	Flux
0	1276	1276	1276	1276	1276	
5	1245	1250	1259	1269	1273	119
15	1076	1088	1135	1186	1209	319
25	850	869	931	982	1019	426
35	609	633	680	735	783	428
45	371	395	452	506	547	351
55	250	251	270	307	323	251
65	156	156	163	169	176	163
75	81	82	84	85	86	89
85	21	21	20	20	20	24
90	0	0	0	0	0	

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

S*	B*	H*	V**
888	1116	1687	2169

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

S*	B*	H*	V**
222	279	422	542

Power, 3500K, 80 CRI (Watts Per Foot)

S*	B*	H*	V**
3.6	4.5	7.0	9.1

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

S*	B*	H*	V**
62	61	60	59

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

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V.

\*\* Based on ITL report: 91551

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

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

### SAMPLE LUMEN ADJUSTMENT CALCULATION

High Output (H), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

$$\text{Total Light Output} = 1687 \text{ lm} \times 0.789 = 1331 \text{ lm}$$

$$\text{Total Light Output per Foot} = 422 \text{ lm/ft} \times 0.789 = 333 \text{ lm/ft}$$

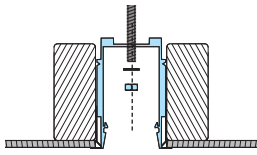
$$\text{watts/foot} = 7.0 \text{ W/ft}$$

$$\text{Efficacy} = \frac{333 \frac{\text{lm}}{\text{ft}}}{7.0 \frac{\text{W}}{\text{ft}}} = 48 \text{ lm/W}$$

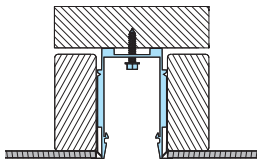
# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

Threaded Rod Option

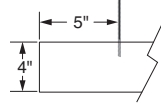


Screw Mount Option

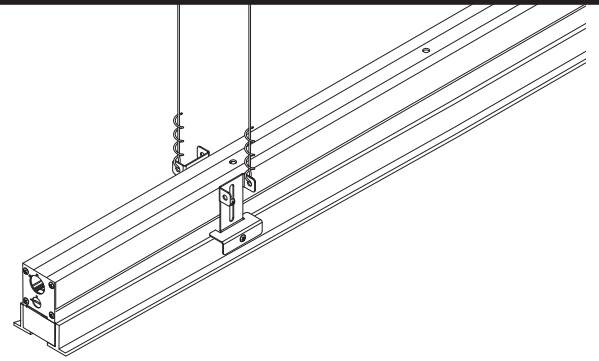
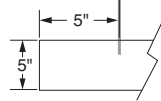


### MOUNTING LOCATION FOR SECURING TO STRUCTURE

Recessed



Regressed



### T-BAR INSTALLATION

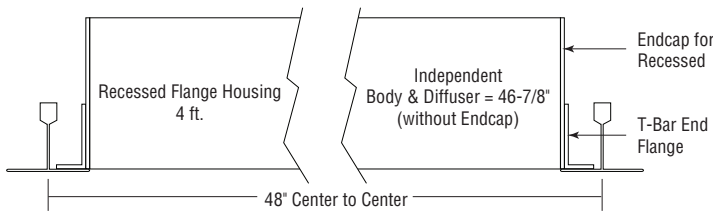
HP-2 R for T-Bar installations comes standard with a conduit plate at the end of the luminaire. Mounting brackets (supplied) secure the luminaire to T-Bar and provide support to structure location. All even foot length (2, 4, 6, ...) luminaire runs are reduced in length by an appropriate amount to fit within typical 2x2 and 2x4 T-Bar grid systems. For uncommon T-Bar systems please consult factory.

### HARD CEILING MOUNTING OPTIONS

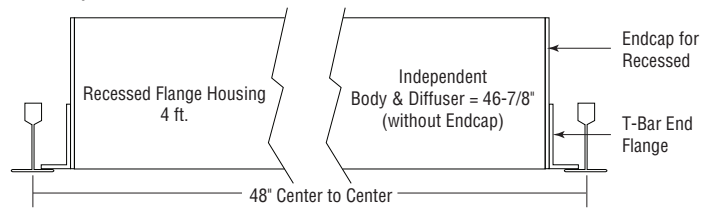
Two mounting options: threaded rod and screw mounting options. Mounting locations are located on each end of the luminaire. Mounting location is 5" away from each end of luminaire.

### GRID LENGTH DETAIL - 4' example

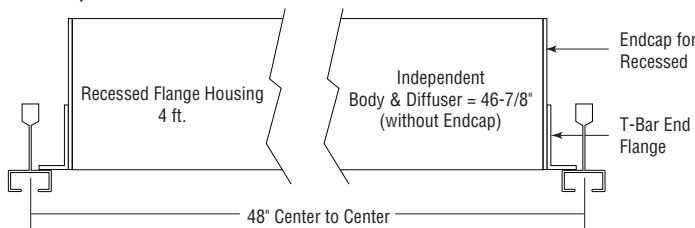
1" T-Bar



9/16" T-Bar

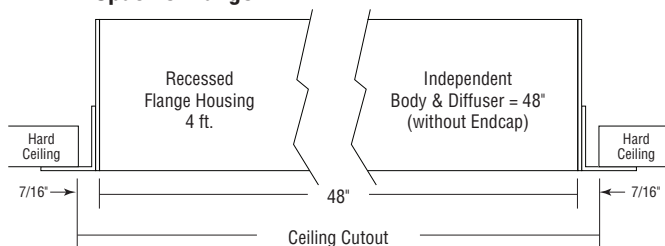


9/16" Screw Slot

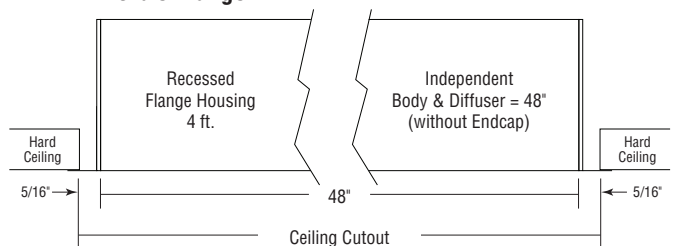


### HARD CEILING LENGTH DETAIL - 4' example

Spackle Flange



Visible Flange

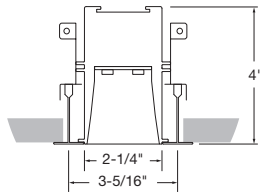


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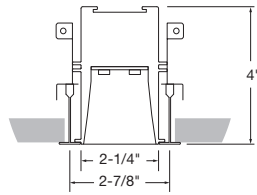
## High Performance 2" Aperture (HP-2) - Recessed

### MOUNTING TYPES: T-BAR

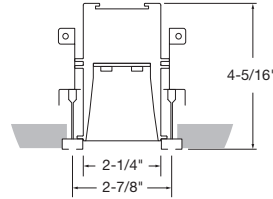
Rough-In Dimensions



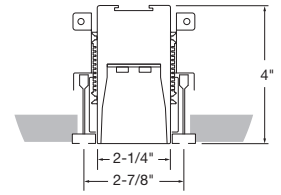
1" T-Bar (C1)



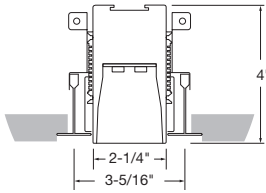
9/16" T-Bar (C2)



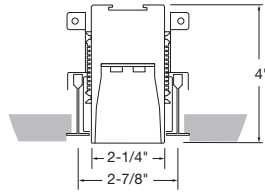
Standard Screw Slot (C3)



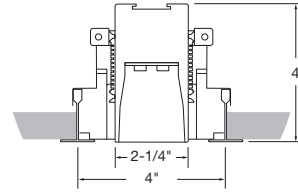
Flush Screw Slot (C3F)



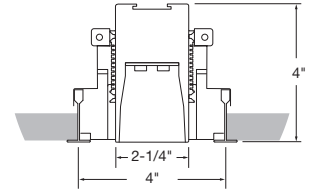
1" Tegular (C1T)



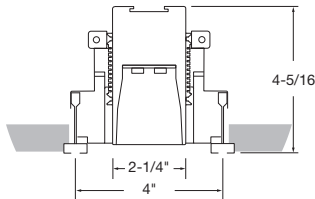
9/16" Tegular (C2T)



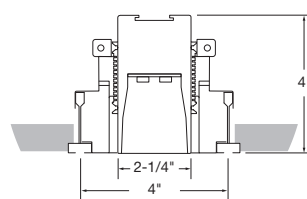
Tech Zone 4" (TZ4)  
1" T-Bar (C1)



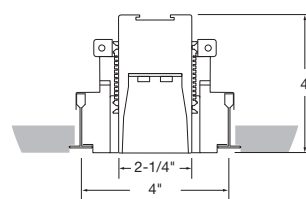
Tech Zone 4" (TZ4)  
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)  
Standard Screw Slot (C3)

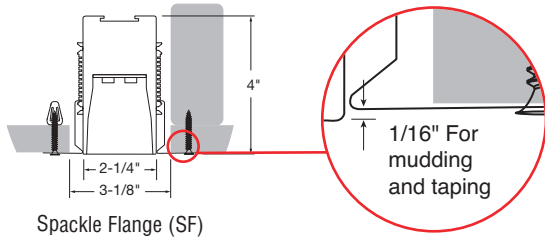


Tech Zone 4" (TZ4)  
Flush Screw Slot (C3F)

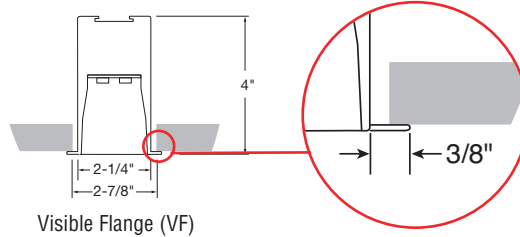


Tech Zone 4" (TZ4)  
9/16" Tegular (C2T)

### MOUNTING TYPES: CUTOUT DIMENSIONS



Spackle Flange (SF)



Visible Flange (VF)

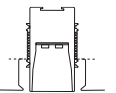
### HOUSING

#### Version 1



Ceiling Options  
VF

#### Version 2



Ceiling Options  
C1T, C2T, C3F,  
SF, TZ6

#### Version 3



Ceiling Options  
C1, C2, C3

\* Note: +/- 1/16"

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732; D727,554 S; D727,550 S, D727,551 S

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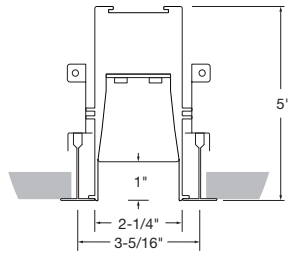


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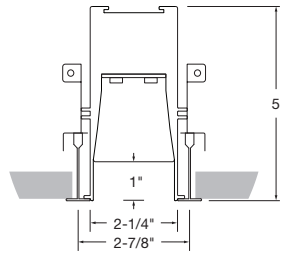
## High Performance 2" Aperture (HP-2) - Recessed

### REGRESSED MOUNTING TYPES: T-BAR

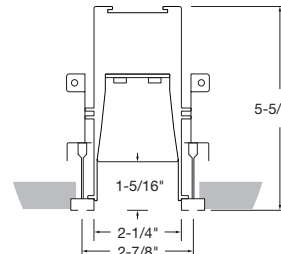
Rough-In Dimensions



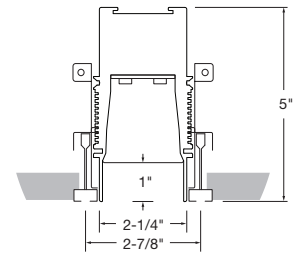
1" T-Bar (C1)



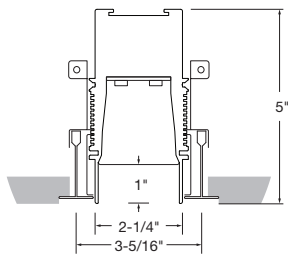
9/16" T-Bar (C2)



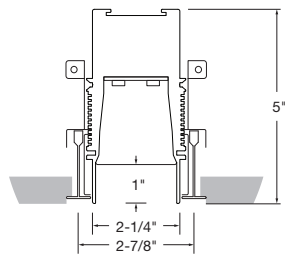
Standard Screw Slot (C3)



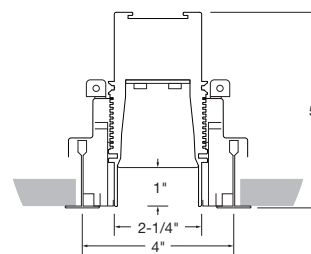
Flush Screw Slot (C3F)



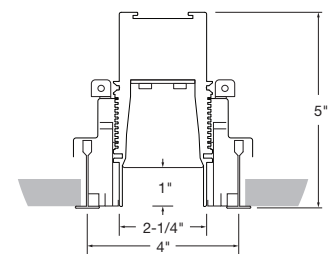
1" T-Bar (C1T)



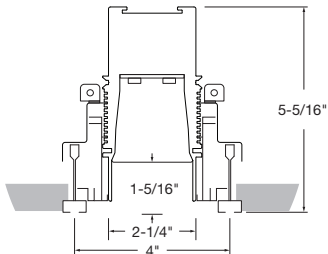
9/16" T-Bar (C2T)



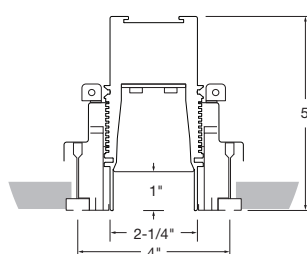
Tech Zone 4" (TZ4)  
1" T-Bar (C1)



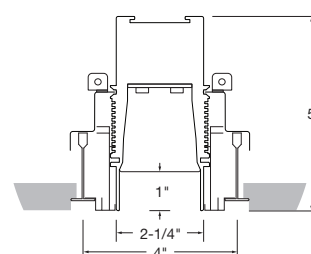
Tech Zone 4" (TZ4)  
9/16" T-Bar (C2)



Tech Zone 4" (TZ4)  
Standard Screw Slot (C3)

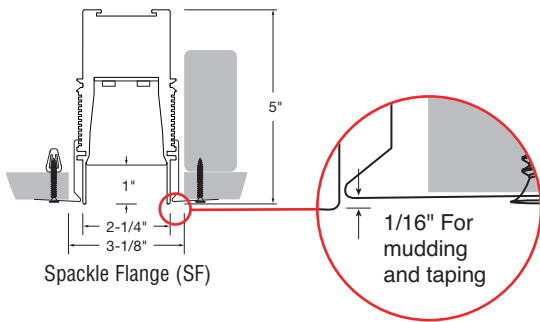


Tech Zone 4" (TZ4)  
Flush Screw Slot (C3F)

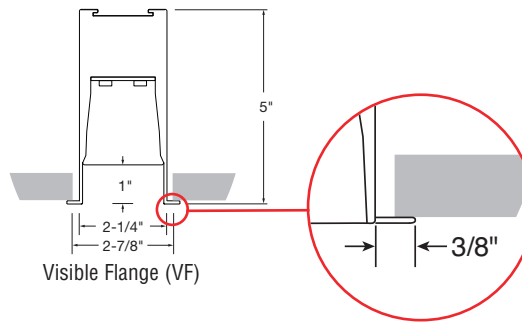


Tech Zone 4" (TZ4)  
9/16" T-Bar (C2T)

### REGRESSED MOUNTING TYPES: CUTOUT DIMENSIONS



Spackle Flange (SF)



Visible Flange (VF)

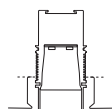
### HOUSING

#### Version 1



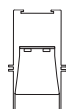
Ceiling Options  
VF

#### Version 2



Ceiling Options  
C1T, C2T, C3F, SF, TZ6

#### Version 3



Ceiling Options  
C1, C2, C3

\* Note: +/- 1/16"

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# FINELITE

## High Performance 2" Aperture (HP-2) - Recessed

### SPECIFICATIONS

**CONSTRUCTION:** Precision-cut 6061-T6 extruded aluminum body. Internal joiner system, plug-together wiring, standard. Housing is powder coated.

**ENDCAPS:** Flat endcaps at each end of run add 1/16" to overall length. Drop Down Lens Illuminated Endcap (DE) includes diffuse element to continue luminance of drop lens.

**MITERED CORNER**<sup>1</sup>: Illuminated 90° corners in a single plane, Flush downlight diffuser (standard), or White Cross Blade Baffle (optional). Custom angles are available (90° minimum on inside corners), contact factory. 90 degree corners not available with Hollowed Ellipse Louver (LHE) or Hex Louver (LHC).

**REFLECTORS:** Die-formed 24-gauge cold-rolled steel reflectors are finished in 96 LG high reflectance matte white powder coat paint.

**DOWNLIGHT OPTION:** 12' maximum diffuser length. Flush frost white snap-in diffuser standard, 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Available with Flush (F), 1" Drop Down Lens (DL), White Cross Blade Baffle (WCB)<sup>2</sup>, Hollowed Ellipse Louver (LHE), Hex Louver (LHC), and Regressed downlight diffusers (RG). 1" Drop Down Lens made of highly efficient acrylic.

**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.

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

**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%. Dimming to 1% available; consult factory. Driver is fully accessible from below the ceiling. Power Factor: ≥0.9. Total Harmonic Distortion (THD): <20%. Expected driver lifetime: 100,000 hours. Dali driver also available; Contact factory.

**LUTRON DRIVER OPTIONS:** LUTES1 (Hi-lume 1% EcoSystem with Soft-On, Fade to Black dimming (LDE1 series)); LUTES5 (5-Series 5% EcoSystem (LDE5 Series)), LUT2W (Hi-lume 1% 2-wire, 120V forward phase dimming (LTEA series)); Contact factory for availability of discontinued Lutron drivers, L3DA-3-wire and L3DA EcoSystem.

**ELECTRICAL:** Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery. Chicago Plenum Option. Factory-choice low-profile backup battery available. 8' minimum luminaire length for low profile battery pack. Backup batteries deliver 1608 lumens. Half of a 4' section will be illuminated in emergency mode.

**INTEGRATED SENSORS:** Integrated PIR (Passive Infrared) occupancy and/or daylight sensors available with Flush, White Cross Blade Baffle, and Regressed downlight diffusers. 3' minimum luminaire length. Refer to Occupancy Sensor and Daylight Sensor tech sheets for more info.

**MOUNTING:** Standard bracket design works with most lay-in ceiling types. Brackets secure luminaire to the ceiling grid from above. Tie-in T-Bar brackets connect the luminaire to the T-Bar for securing to structure. Consult local codes for tie-wire recommendations.

**FINISHES:** Finelite Signal White powder coat standard.

**FEED:** Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when luminaire current exceeds 5 amps. Optional 6' flex conduit whips available.

**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.

**LABELS:** Fixture 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. 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 2011/65/EU.

**WEIGHT:** 2.3 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>1</sup> White Cross Blade Baffle (WCB) is not available with custom angles. Available in 90 degrees only

<sup>2</sup> White Cross Blade Baffle (WCB) currently not advisable for drywall