#### DESCRIPTION

The Shaper 340 Farallon 6" LED recessed downlight designed for high performance downlighting with multiple decorative glass trim options. Featuring a two-stage diffused reflector system producing smooth distribution with excellent light control. Lumen packages range from 1000, 1500, 2000, 3000, 4000 lumen outputs, with 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K. Available with dim-to-warm technology similar to halogen at full power. The 3000K LED smoothly warms down to a dimmed 1850K, creating a rich warm glow within the space. Shaper offers a selection of high quality glass trims for an added aesthetic appeal for downlighting applications.

# Catalog # **Project** Date Comments Prepared by

#### SPECIFICATION FEATURES

# CONSTRUCTION

Painted and die cast aluminum/ spun aluminum lower reflector with a lensed upper optical chamber, provides superior lumen output with minimal source brightness. Spun reflectors are offered in Portfolio Alzak® Specular Clear. Available with a non-conductive polymer trim. Reflector is retained with two torsion springs holding the flange tight to the finished ceiling surface. Glass options are made of Borosilicate Glass, 0.2" thick [5mm] and available in clear, frosted, or sandblasted quadrate pattern. Bottom edges are ground and polished. The GCC/ GFF/ GCF inner fluted cylindrical Borosilicate glass is 0.1" thick [2.3mm]. Borosilicate Glass contains 5% or more of B2O3, is highly resistant to heat and shock with low coefficients of expansion, thus heat resistant

#### **JUNCTION BOX**

Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring. (4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs.

#### GLASS

Farallon Glass trims are a handcrafted, hand-polished and hand etched artisan process. No trims will be exactly alike and slight glass and pattern inconsistencies may occur.

#### ELECTRICAL

Thermal protection provided to guard against overheating and misuse of insulation over and around fixture. Integral electronic low voltage transformers used. Transformers and electrical connections are accessible through ceiling opening.

#### THERMAL

Aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

Chip on board with a multitude of highly efficient white LED's, combined with a high reflectance upper reflector and convex transitional lens produce even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3-step MacAdam ellipses. Quick disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80, 90 or 97 CRI. D2W™ – dim-to-warm shifts

CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

#### DRIVER

Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1% (offered up to 4000 lumens). Optional 120V leading edge, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

#### COMPLIANCE

Thermally protected and cULus listed for damp locations with covered ceiling. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. 2000 lumen and above are Non-IC rated - Insulation must be kept 3" from top and sides of housing. IC rated up to 1500 lumens. Photometric testing completed in accordance with IES LM 79 and TM-30 standards. LED life testing completed in accordance with LM 80 standards.

#### LIFE AND WARRANTY

Standard five-year warranty on all parts.



Shaper

340-6B **Series** 

> **LED** Recessed

LED 6" Farallon Glass Downlight







ORDERING INFORMATION "HOUSING": (Select HOUSING and then MODULE/TRIM/GLASS TRIM for complete specification)

Sample Housing Number: 340-6B-15-D010

Series		HOUSING	L	ight Level/Wa	ttage <sup>5</sup>	v	oltage		Driver
340 = Shaper Farallon recessed downlight (housing)	6B = 6BCP =	6" downlight 6" downlight, Chicago Plenum	15 = 20 = 30 =	1000 lumens 1500 lumens 2000 lumens 3000 lumens 4000 lumens	, 15.5W <sup>1,3,4</sup> , 21.2W <sup>1,3,4</sup> , 27.6W <sup>2</sup>		120 - 347	277V	0-10V Dimming, 1% to 100%, 120V-277V 0-10V Line Voltage Dimming, 5% to 100%, 120V-277V 0-10V Dimming, 1% to 100%, 120V-277V Fifth Light® (DALI) Dimming, 0%-100%, 120V-2177V DMX Dimming, 0% to 100%, 120V-277V Lutron® Hi-Lume Forward Phase Dimming, 1%-100%, 120V only Lutron® Hi-Lume 3 Wire Dimming, 1%-100%, 120V-277V Lutron® Ecosystem dimming, 1%-100%, 120V-277V

ORDERING INFORMATION "MODULE/TRIM/GLASS TRIM": (Select HOUSING and then MODULE/TRIM/GLASS TRIM for complete specification)

Sample Module/Trim/Glass Kit Number: 340-EU6B-10-9030D2W-6LBW1LI-FF

Series	MODULE	Light Level <sup>5</sup>	Color Temperature/CRI	TRIM	GLASSTRIM
340 = Shaper Farallon recessed downlight (module + glass trim)	EU6B = 6" Universal LED Module	1020 = 1000, 1500, 2000 lumens <sup>1</sup> 1015 IC = 1000-1500 lumens, IC rated <sup>3</sup> 3040 = 3000-4000 lumens <sup>2</sup> Dim 2 Warm options <sup>4</sup> 10 = 1000 lumens, D2W 15 = 1500 lumens, D2W 20 = 2000 lumens, D2W	9024 = 90 CRI, 2400K 9027 = 90 CRI, 2700K 9030 = 90 CRI, 3000K 9035 = 90 CRI, 3500K 9040 = 90 CRI, 4000K 9050 = 90 CRI, 5000K 9030D2W = 90 CRI, 1800-3000K Dim 2 Warm <sup>3</sup>		CC = Clear Cylinder CF = Frosted Cylinder CQ = Frosted Quadrate Pattern GCC = Glass in Glass - Clear Inside/ Clear Outside GFF = Glass in Glass - Frosted Inside/ Frosted Outside GFC = Glass in Glass - Frosted Inside/ Clear Outside FF = Flared Glass - Frosted Flute

COMPLETE ORDERING INFORMATION: (must order HOUSING + MODULE/TRIM/GLASSTRIM for complete fixture)

**Cooper Lighting Solutions** 

www.cooperlighting.com

Sample for complete fixture: 340-6B15D010

340-EU6B109030D2W-6LBW1LI-FF

P: 303-393-1522



Note: All glass trims have polished edges.



CC Cylindrical Glass/ Clear



GCC Glass-in-a Glass, Clear Inside/ Clear outside



**CF** Cylindrical Glass/ Frosted



**GFF**Glass-in-a Glass,
Frosted Inside/
Frosted outside



**CQ** Cylindrical Glass/ Frosted Quadrate

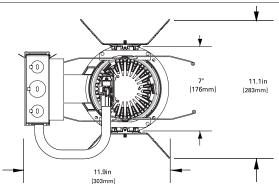


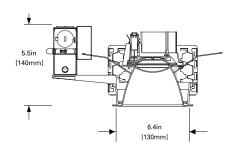
GFC Glass-in-a Glass, Frosted Inside/ Clear outside



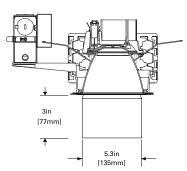
FF Flared glass/ Frosted Flute

# GLASS, TRIM, HOUSING DIMENSIONS

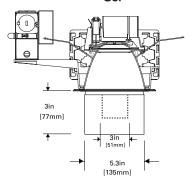


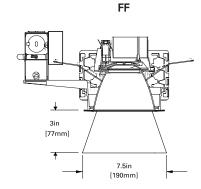


CC, CF and CQ



GCC, GFF and GCF





DATA AND ADDITIONAL INFORMATION

ENERGY DATA
Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -30°C (-22°F)
EMI/RFI: FCCTitle 47 CFR, Part 15, Class B (Consumer)
Input Voltage: UNV (120V - 277V)
Power Factor: >0.90
(at nominal input 120-277 VAC & 100% of Rated Output Power)
Input Frequency: 50/60Hz

LIGHT LEVEL FOR HOUSING + MODULE + CCT/CRI CHART				
		IGHT LEVELS	IC	D2W
Light Level	10	30	10	10
Housing	15	40	15	15
	20			20
	$\overline{}$	<b>→</b>	<b>↓</b>	<b>→</b>
				10
Light Level Module	1020	3040	1015IC	15
				20
	$\overline{}$	<b>↓</b>	<b>↓</b>	<b>V</b>
	9024	9024	9024	
	9027	9027	9027	
CalauTauau (CDI	9030	9030	9030	9030D2W
Color Temp/CRI	9035	9035	9035	9030D200
	9040	9040	9040	
	9050	9050	9050	

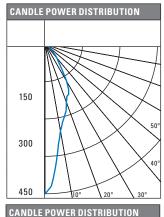


Cooper Lighting Solutions 18001 E. Colfax Avenue Denver, CO 80011 P: 303-393-1522 www.cooperlighting.com

See page 3 for Technical Notes

#### **PHOTOMETRICS**





ZONAL	LUMEN SU	MMARY
Zone	Lumens	% Fixture
0-30	435	65.3
0-40	568	85.4
0-60	652	98.1
0-90	665	99.9
90-180	5.1	6.6
0-180	665	100

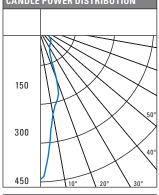
LUMINA	NCE DATA
Angle	Average 0°
Candela	Luminance
Degrees	(cd/sm)
30	24920
45	6828
55	2639
65	1127
75	731
85	524

LUMINANCE DATA			CANDELA TABL		
Angle Candela	Average 0° Luminance		Degrees Vertical	Candela	
Degrees	(cd/sm)		0	1159	
30	24920		5	942	
45	6828		15	578	
55	2639		25	430	
65	1127		35	203	
75	731		45	74	
85	524		55	23	
		'	65	7	
			75	3	
			85	1	
			90	0	
LUMINA	NCE DATA		CANDELA	TABLE	

CONE OF LIGHT						
0° Aiming Angle Horizontal						
Illuminance on Floor						
MH	FC	L	W			
6'	32.2	2.6	2.6			
8'	18.1	3.4	3.4			
10'	11.6	4.4	4.4			
12'	8	5.2	5.2			
15'	5.1	6.6	6.6			

MH = Mounting Height FC = FootcandleL = Length of eclipse W = Width of eclipse

SHAPER 34	0-6B FROSTED CYLINDER
Test Number	P229182
Lumcat	340-6B-10-D010/340-EU6B- 1020-9035-6LBW1LI-CF
Lumens	629 Lm
Watts	9.9 W
LPW	63.5 Lm/W
сст	3500K
SC (0/90/45)	0.42/0.42/0.55
СВСР	936 cd



ZUNAL	. LUMEN SU	MMAKY
Zone	Lumens	% Fixture
0-30	283	45
0-40	367	58.3
0-60	521	82.8
0-90	615	97.8
90-180	14	2.2
0-180	629	100

LUMINA	ICL DATA
Angle	Average 0°
Candela	Luminance
Degrees	(cd/sm)
30	6216
45	4425
55	2915
65	1829
75	1145
85	756

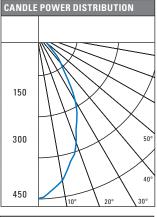
Degrees Vertical         Candela           0         936           5         770           15         460           25         179           35         133           45         113           55         75           65         46           75         28           85         17           90         12	CANDLLA	IADLL
5 770 15 460 25 179 35 133 45 113 55 75 65 46 75 28 85 17		Candela
15 460 25 179 35 133 45 113 55 75 65 46 75 28 85 17	0	936
25 179 35 133 45 113 55 75 65 46 75 28 85 17	5	770
35 133 45 113 55 75 65 46 75 28 85 17	15	460
45 113 55 75 65 46 75 28 85 17	25	179
55 75 65 46 75 28 85 17	35	133
65 46 75 28 85 17	45	113
75 28 85 17	55	75
85 17	65	46
	75	28
90 12	85	17
	90	12

CONE OF LIGHT					
0° Aiming Angle Horizontal					
Illum	ninance	on Flo	or		
MH	FC	L	W		
6'	26	2.4	2.4		
8'	14.6	3.2	3.2		
10'	9.4	4.2	4.2		
12'	6.5	5	5		
15'	4.2	6.2	6.2		
MIL Manatian Height					

MH = Mounting Height FC = Footcandle L = Length of eclipse W = Width of eclipse

# SHAPER 340-6B CLEAR GLASS CYLINDER IN CLEAR GLASS CYLINDER

Test Number	P229298
Lumcat	340-6B-10-D010/340-EU6B 1020-9035-6LBW1LI-GCC
Lumens	720 Lm
Watts	9.9 W
LPW	72.8 Lm/W
ССТ	3500K
SC (0/90/45)	0.82
СВСР	737 cd



ZONAL LUMEN SUMMARY				
Zone	Lumens	% Fixture		
0-30	427	59.2		
0-40	579	80.3		
0-60	696	96.7		
0-90	719	99.8		
90-180	1	0.2		
0-180	720	100		

LUMINANCE DATA			CA
Angle Candela Degrees  30 45 55 65 75 85	Average 0° Luminance (cd/sm) 26073 9642 4288 2130 1462 1123		De Ve

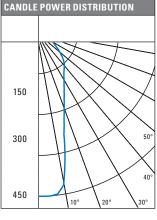
CANDELA TABLE			CONE	)FI
Degrees	Candela		0° Aimir	ng A
Vertical			Illum	nina
0	737		МН	F
5	706		6'	20
15	587			
25	424		8'	11
35	236		10'	7
45	104		12'	5
55	38		15'	3
65	14		MH = M	011
75	6		FC = Foote L = Length	
85	2			
90	1		W = Wid	dth

CONE OF LIGHT				
0° Aiming Angle Horizontal				
Illum	ninance	on Flo	or	
MH	FC	L	W	
6'	20.5	4.8	4.8	
8'	11.5	6.4	6.4	
10'	7.4	8	8	
12'	5.1	9.8	9.8	
15'	3.3	12.2	12.2	
	0° Aimir Illum MH 6' 8' 10'	0° Aiming Anglilluminance    MH   FC	0° Aiming Angle Horiz    Illuminance on Flo   MH	

unting Height candle of eclipse of eclipse

# SHAPER 340-4B FROSTED GLASS CYLINDER IN FROSTED GLASS CYLINDER

Test Number	P229269
Lumcat	340-6B-10-D010/340-EU6B- 1020-9035-6LBW1LI-GFC
Lumens	638 Lm
Watts	9.9 W
LPW	64.4 Lm/W
CCT	3500K
SC (0/90/45)	0.61
CBCP	552 cd



ZONAL LUMEN SUMMARY				
Zone	Lumens	% Fixture		
0-30	256	40.2		
0-40	358	56		
0-60	526	82.5		
0-90	626	98.2		
90-180	11	1.8		
0-180	638	100		

	LUMINANCE DATA		
	Angle	Average 0°	
	Candela Degrees	Luminance	
		(cd/sm)	
	30	7777	
	45	4934	
	55	3085	
	65	1916	
	75	1232	
	85	787	

CANDELA	TABLE
Degrees Vertical	Candela
0	552
5	553
15	356
25	219
35	160
45	126
55	80
65	49
75	30
85	17
90	13

CONE OF LIGHT					
0° Aimir	ng Angl	e Horiz	ontal		
Illum	ninance	on Flo	or		
MH	FC	L	W		
6'	15.3	3.6	3.6		
8'	8.6	4.8	4.8		
10'	5.5	6	6		
12'	3.8	7.2	7.2		
15'	2.5	9	9		

MH = Mounting Height FC = Footcandle L = Length of eclipse W = Width of eclipse

### **TECHNICAL NOTES**

- 1. For Standard Light Levels, select 10, 15, or 20 under HOUSING Light Levels, and 1020 under MODULE's Light Level. Then select corresponding CRI.
  2. For Standard Light Levels, select 30 or 40 for HOUSING Light Level, and 3040 under MODULE's Light Level. Then select corresponding CRI.
  3. For IC Option, select 10 or 15 under HOUSING Light Level, and 1015IC for MODULE's Light Level. Then select corresponding CRI.
  4. For Dim to Warm (D2W) select 10, 15, or 20 under HOUSING Light Levels, and 10, 15, or 20 under MODULE's Light Level, and 9030D2W for Color temp/CRI.
  5. See Light Level for HOUSING + MODULE + CCT/CRI chart for all compatability on page 2.