ID+ 4.5"

LED DOWNLIGHT

FOCAL POINT®


Solite lens option


clear diffuse


warm diffuse


white


clear diffuse & white flange

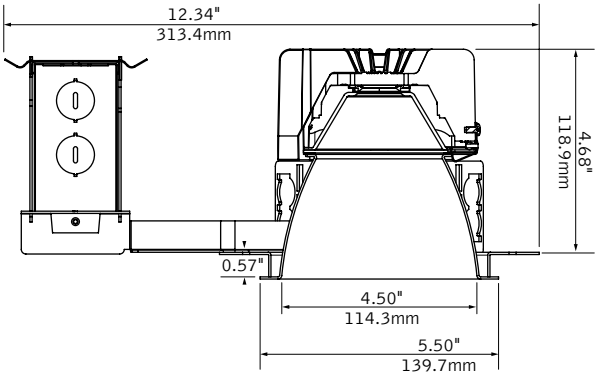

warm diffuse & white flange


black

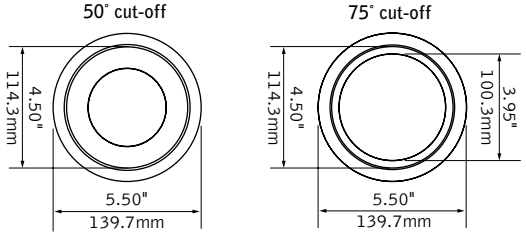

trimless companion

DIMENSIONAL DATA

Downlight



Trims



FEATURES

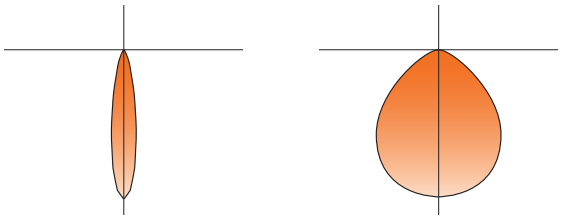
Field adjustability of ceiling thickness from 0.5" to 3.0".

50° or 75˚ cutoff to light source and its image.

Selection of dimming drivers available.

Right Light: Standard delivered lumen outputs 1000, 1500, 2000, 2500, and 3000.

PERFORMANCE



19˚ Spot

Lumen Output: 1500lm

Total System Watts: 19W

Spacing Criteria: 0.32

91˚ Super Wide Flood

Lumen Output: 1500lm

Total System Watts: 19W

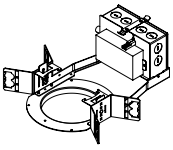
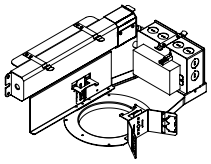
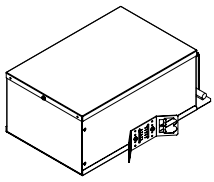
Spacing Criteria: 1.22

Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data. Visit energystar.gov for model specifics.

ENERGY STAR

fixture: project:

HOUSING DETAILS

Standard	Emergency Battery	IC/Chicago Plenum
		
L x W x H 12.59" x 11.02" x 5.20"	L x W x H 16.21" x 11.21" x 6.02"	Standard L x W x H 16.85" x 11.45" x 6.13" Emergency L x W x H 16.85" x 12.95" x 6.13"

HOUSING SPECIFICATIONS

Construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Type IC inherently protected, suitable for direct contact with insulation. Butterfly brackets allow mounting to 1/2" emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry-outs. T-rated: UL & cUL Listed for (6) #14 AWG (3 in, 3 out) 90°C conductors and feed through–branch wiring. IC/CP housing: UL & cUL Listed for (8) #12 AWG (4 in, 4 out) 90°C conductors and feed through-branch wiring for IC/CP housing. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 3.0" thickness. For thicker ceiling consult factory. Order TZB option for TechZone compatible housing brackets. T-rated housing will not exceed 6lb, IC/CP housing will not exceed 12lb.

Electrical

Choice of constant current dimming drivers. Power factor > .9 typical.

Emergency

Emergency Battery Pack: Bodine BSL17C–C2. Emergency output —7W for 90 minutes. Maximum mounting height: 25.8ft. (Black reflector: 18.0ft.) Not wet location or outdoor rated.

Labels

UL and cUL Listed. Suitable for Dry, Damp or Wet Locations, indoor use only. Specify Outdoor rated (OD) for outdoor recessed ceiling applications.

Lumen Maintenance

Reported: L70 at >55,000 hours
L90 at >55,000 hours

Calculated: L70 at 204,000 hours
L90 at 59,000 hours

Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.

Reliability

At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

Warranty

LED System rated for operation in ambient environments up to 25°C. 5-year limited warranty. Fixture with Outdoor rated option must be installed in a covered ceiling and is warrantied for operation in ambient environments between -20˚C to +40˚C.

TRIM & LED SPECIFICATIONS

LED System

Proprietary array incorporates premium LEDs on a robust platform. May be specified in 2700K, 3000K, 3500K or 4000K, 80+ CRI or 90+ CRI. Color accuracy within 2 SDCM. Aluminum heat sink provides appropriate thermal management.

Aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is .050" spun aluminum. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim. Trims are self-flanged. Non-painted trim matches reflector finish. White or Black painted flange may also be specified.

Optics

50-degree or 75-degree cut–off to light source and its image.

Ordering Code	Cut-Off Degree	Lumen Output	Distribution Beam Spread | Spacing Criteria					
			SP	NFL	FL	WFL	VWFL	SWFL
DN	 50˚	1000-2500	19˚ | .32	24˚ | .42	34˚ | .54 44˚ | .68	59˚ | .92	-	-
		3000	-	25˚ | .42	35˚ | .58 44˚ | .70	60˚ | .94	-	-
DSS	 75˚	1000-2500	-	-	-	-	73˚ | 1.00	91˚ | 1.22
		3000	-	-	-	-	68˚ | .98	91˚ | 1.22

PERFORMANCE CHART* - see page 3.

HOUSING ORDERING

		FLC4D
Housing Series		
ID+ 4.5" Round Downlight	FLC4D	
Trim Type		RO
Round Overlap	RO	
Lumen Output		
1000 Lumens	1000L	
1500 Lumens	1500L	
2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens (Not available with SP distribution, LFP or LTE.)	3000L	
Voltage		
UNV 120V/277V (IC housing only. Not available with LFP or LTE. See Housing Type for output restrictions.)	UNV	
120V	120	
277V	277	
Control System & Dimming Level		
0-10V - 0% Dimming	LZ1	
0-10V - 1% Dimming	L11	
0-10V - 10% Dimming	LD1	
Forward Phase (120V only)	LFP	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1	
Lutron 5-Series EcoSystem (LDE5) - 5% Dimming	LU5	
Lutron Hi-Lume - Forward Phase - 1% Dimming (120V only)	LTE	
DALI - 0% Dimming	DZ1	
DALI - 1% Dimming	D11	
Housing Type		
IC Rated / Airtight (L11, LD1, LH1, LU5 2000L max. LZ1, D11, DZ1, LFP 1500L max. LTE 1000L only. LC4AT required for Airtight.)	IC	
Thermally Protected	T	
Factory Options		
Bar Hangers	BH	
Chicago Plenum / National Plenum	CP	
Emergency Battery (Must order LC4EM trim. Not wet location or outdoor rated.)	EM	
Outdoor Rated (LD1 driver only. IC housing 1500L max. See dimming Performance Chart on page 3.)	OD	
6" TechZone Brackets	TZB	

TRIM & LED MODULE

Aperture		
4.5" Round Reflector	LC4	
4.5" Round Reflector - Airtight (IC housing required for Airtight rating)	LC4AT	
4.5" Round Reflector - Emergency (Required for "EM" option. DN optic only. Not wet location or outdoor rated.)	LC4EM	
Trim Type		
Round	RO	
Round Die-Cast Overlap (DSS, VWFL & SWFL options only)	RDO	
Lumen Output (Trim & Housing output must match)		
1000 Lumens	1000L	
1500 Lumens	1500L	
2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens (Not available with SP distribution)	3000L	
Color Temperature		
2700K, 80+ CRI **or** 90+ CRI	27K **or** 927K	
3000K, 80+ CRI **or** 90+ CRI	30K **or** 930K	
3500K, 80+ CRI **or** 90+ CRI	35K **or** 935K	
4000K, 80+ CRI **or** 90+ CRI	40K **or** 940K	
Optic		
Downlight with 50˚ cut-off	DN	
Super Short Cone with Solite Lens 75˚ cut-off (Die-cast trim, RDO, with VWFL or SWFL only)	DSS	
Distribution		
Spot	SP	
Narrow Flood	NFL	
Flood 1	FL1	
Flood 2	FL2	
Wide Flood	WFL	
Very Wide Flood (DSS Optic only)	VWFL	
Super Wide Flood (DSS Optic only)	SWFL	
Color		
Clear Diffuse	CD	
Warm Diffuse	WD	
Black (Black Painted flange only)	BK	
White (White Painted flange only)	WH	
Flange Finish		
Non-Painted (Clear and warm diffuse only)	NP	
Black Painted	BP	
White Painted	WP	

QS 5 DAY* Options in orange qualify for the Quickship program. 5-day up to 100 pieces. Refer to Quickship Guide for complete details.

ROUND DOWNLIGHT PERFORMANCE CHART

Lumen Output	Delivered Lumens	System Watts	LPW
1000L	1045	11	92
1500L	1571	19	82
2000L	2087	26	82
2500L	2523	32	79
3000L	3050	36	84

Based on downlight (DN) optic, 3500K, 80CRI, Wide Flood, Clear Diffuse.
Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE

Lumen Output	Minimum Dimming Level
1000L	25%
1500L	16%
2000L	12%
2500L	10%
3000L	10%

ROUND DOWNLIGHT LUMEN MULTIPLIER TABLE

Color Temperature & CRI

Trim Type	Optic	Color Temperature	Multiplier
ALL	ALL	2700K, 80+ CRI [27K]	0.93
		2700K, 90+ CRI [927K]	0.80
		3000K, 80+ CRI [30K]	0.97
		3000K, 90+ CRI [930K]	0.85
		3500K, 80+ CRI [35K]	1.00
		3500K, 90+ CRI [935K]	0.83
		4000K, 80+ CRI [40K]	1.01
		4000K, 90+ CRI [940K]	0.86

Distribution

Trim Type	Optic	Distribution	Multiplier	
			1000 - 2500L	3000L
Round Trimless [RT]	Round Downlight with 50˚ cut-off [DN]	Spot [SP]	1.07	-
		Narrow Flood [NFL]	1.03	1.05
		Flood 1 [FL1]	0.99	1.01
		Flood 2 [FL2]	0.99	0.98
		Wide Flood [WFL]	1.02	1.03
Round Overlap [RO]	Round Downlight with 50˚ cut-off [DNT]	Spot [SP]	1.07	-
		Narrow Flood [NFL]	1.12	1.11
		Flood 1 [FL1]	1.07	1.01
		Flood 2 [FL2]	1.00	1.02
		Wide Flood [WFL]	1.01	1.02
Round Die-Cast Trimless [RDT]	Super Short Cone with Solite Lens with 75˚ cut-off [DSS]	Very Wide Flood [VWFL]	0.83	0.84
		Super Wide Flood [SWFL]	0.80	0.81
Round Die-Cast Overlap [RDO]	Super Short Cone with Solite Lens with 75˚ cut-off [DSS]	Very Wide Flood [VWFL]	0.80	0.83
		Super Wide Flood [SWFL]	0.82	0.82

Color

Trim Type	Optic	Color	Multiplier
Round Trimless [RT] and Round Overlap [RO]	Round Downlight with 50˚ cut-off [DN]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.86
		White [WH]	1.00
		Black [BK]	0.50
Round Die-Cast Trimless [RDT] and Round Die-Cast Overlap [RDO]	Super Short Cone with Solite Lens with 75˚ cut-off [DSS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.95
		White [WH]	1.10
		Black [BK]	0.85

Multiplier tables are provided to aid with estimation of lumen levels across options. Apply multipliers against ordered Lumen Output to estimate Delivered Lumens. Refer to IES files for most accurate photometric information.

How To Use Lumen Multipliers

Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Color)

Example: LC4-RO-2000L-935K-DN-NFL-WH
(2000) x (0.83) x (1.12) x (1.00) ≈ 1859 lm (estimated delivered lumens)