

ID+ 4.5"

LED DOWNLIGHT



Solite lens option



clear diffuse



warm diffuse



white



clear diffuse &
white flange



warm diffuse &
white flange

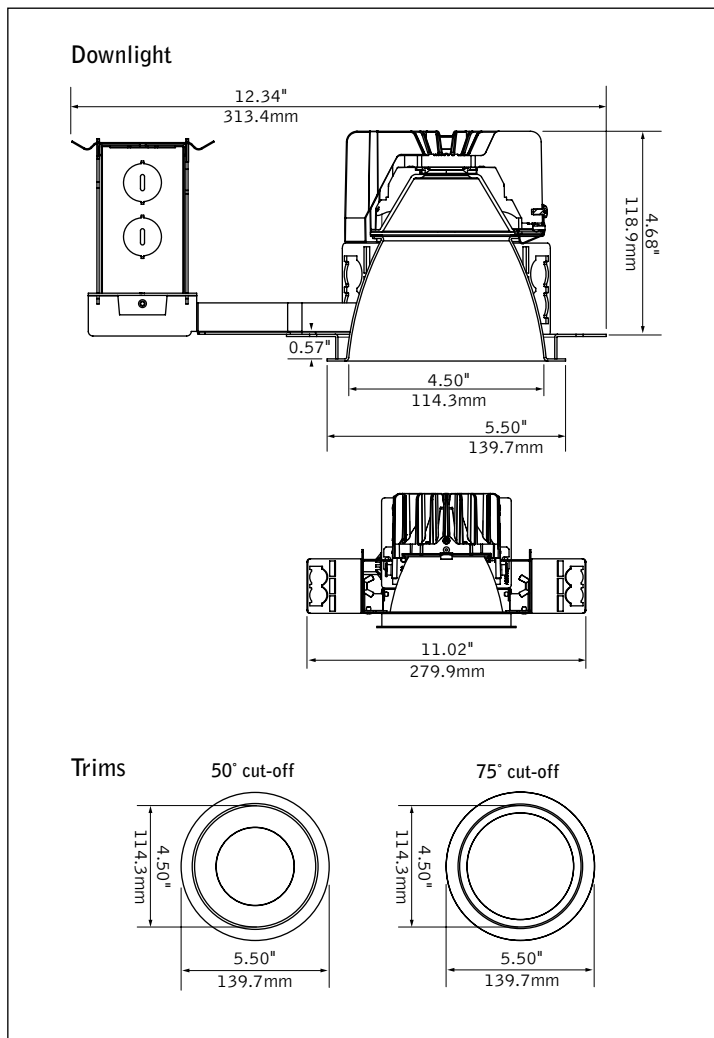


black



trimless companion

DIMENSIONAL DATA



FEATURES

Field adjustability of ceiling thickness from 0.5" to 3.0"

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

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

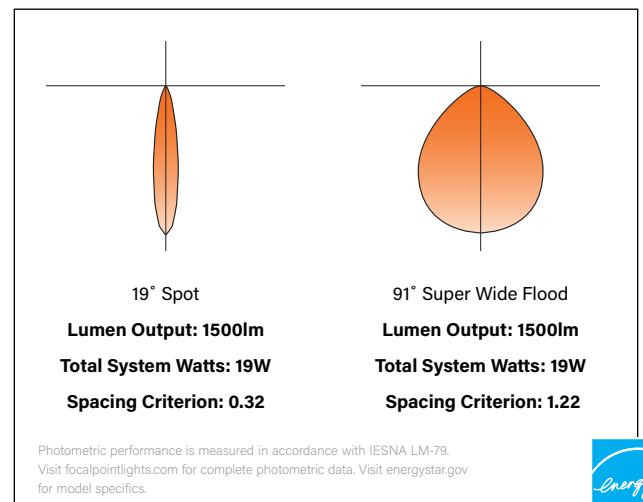
Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Compatible with common pre-engineered grid ceiling systems requiring luminaires fitting into a 6" slot.

Available with The Naturals, a series of finishes that exude biophilic beauty.

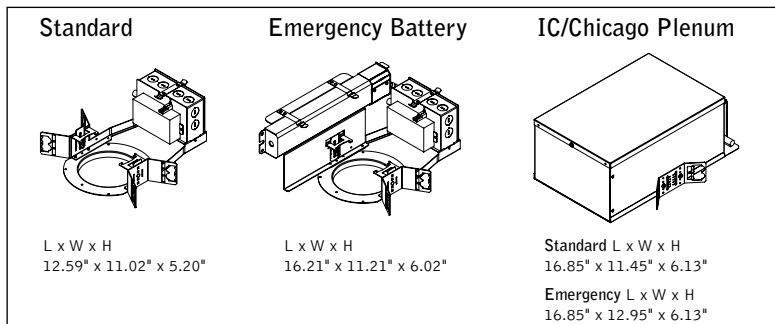
PERFORMANCE



fixture:

project:

HOUSING DETAILS



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. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

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 Calculated: L70 at 204,000 hours
L90 at >55,000 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 warranted 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. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. 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. The Naturals: 100% low VOC vinyl available with DSS only.

Optics

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

Op-tic	Cut-Off Degree	Lumen Output	Distribution Beam Spread							Spacing Criteria
			SP	NFL	FL1	FL2	WFL	VWFL	SWFL	
DN		1000-2500	19° .32	24° .42	34° .54	44° .68	59° .92	-	-	
		3000	-	25° .42	35° .58	44° .70	60° .94	-	-	
DSS		1000-2500	-	-	-	-	-	73° 1.00	91° 1.22	
		3000	-	-	-	-	-	68° .98	91° 1.22	

PERFORMANCE CHART* - see page 3.

Focal Point LLC reserves the right to change specifications for product improvement without notification.

HOUSING ORDERING

Housing Series

ID+ 4.5" Round Downlight **FLC4D**

Trim Type **RO**

Round Overlap **RO**

Color Options **SW**

Standard White, 80 & 90 CRI **WDM**

Warm Dim

(1500 & 2000 lumens only. UNV & EM not available.)

Lumen Output

1000 Lumens **1000L**

1500 Lumens **1500L**

2000 Lumens **2000L**

2500 Lumens **2500L**

3000 Lumens **3000L**

(Not available with SP distribution or LFP)

Voltage

UNV 120V/277V **UNV**

(IC housing only. Not available with LFP)

120V **120**

277V **277**

Low Voltage **LV**

(IC housing: 2000L max. T housing: 1000L only)

Control System & Dimming Level

0-10V - 0% Dimming **LZ1**

0-10V - 1% Dimming **L11**

0-10V - 10% Dimming **LD1**

Low Voltage, PoE compatible **LVN**

(No driver. Not available with EM. LV Voltage only)

Forward Phase (120V only) **LFP**

Lutron Hi-Lume EcoSystem (LDE1) -

1% Dimming **LH1**

DALI - 0% Dimming **DZ1**

DALI - 1% Dimming **D11**

Housing Type

IC Rated / Airtight **IC**

(L11, LD1, LVN, LH1 2000L max. LZ1, D11, DZ1, LFP 1500L max.)

LC4AT required for Airtight. Not available with EM.)

Thermally Protected

Factory Options **T**

Bar Hangers **BH**

Chicago Plenum **CP**

Emergency Battery** **EM**

(Must order LC4EM trim. Not wet location or outdoor rated.)

Outdoor Rated **OD**

(LD1 driver only. IC housing 1500L max. See dimming Performance Chart on page 3.)

Bracket for 6" slot pre-engineered ceiling **TZB**

TRIM & LED MODULE

Aperture

4.5" Round Reflector **LC4**

4.5" Round Reflector - Airtight **LC4AT**

(IC housing required for Airtight rating)

4.5" Round Reflector - Emergency** **LC4EM**

(Required for "EM" option. DN optic only.)

Not wet location or outdoor rated.)

Trim Type

Round **RO**

Round Die-Cast Overlap **RDO**

(DSS, VWFL & SWFL options only)

Lumen Output

(Trim & Housing output must match)

1000 Lumens **1000L**

1500 Lumens **1500L**

2000 Lumens **2000L**

2500 Lumens **2500L**

3000 Lumens **3000L**

(Not available with SP distribution)

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**

Warm Dim: 2700-1800K, 90+ CRI **92718W**

(1500 & 2000 lumens only)

Warm Dim: 3000-1800K, 90+ CRI **93018W**

(1500 & 2000 lumens only)

Optic

Downlight with 50° cut-off **DN**

Super Short Cone with Solite Lens 75° cut-off **DSS**

(Die-cast trim, RDO, with VWFL or SWFL only)

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

(See finishes page for The Naturals options available on DSS optic only)

Clear Diffuse **CD**

Warm Diffuse **WD**

Black (Black Painted flange only) **BK**

White (White Painted flange only) **WH**

Flange Finish

Non-Painted, matches reflector color **NP**

(Clear and warm diffuse only)

Black Painted **BP**

White Painted **WP**



5/10 DAY**

Options in orange qualify for the Quickship program. All options 5-day up to 200 pieces except Emergency Battery and 4.5" Round Reflector - Emergency 10-day only.

ROUND DOWNLIGHT PERFORMANCE CHART

Lumen Output	Delivered Lumens	System Watts	LPW
1000L	1045	11	92
1500L	1571	19	82
 1500L	1433	25	57
2000L	2087	26	82
 2000L	2014	37	55
2500L	2523	32	79
3000L	3050	36	84

Based on downlight (DN) optic, 3500K, 80CRI, Wide Flood, Clear Diffuse. WDM base on 3000 - 1800K, 90 CRI.
Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE CHART

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	Lumen Output	Color Temperature	Multiplier
ALL	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
		1500	2700-1800K, 90+ CRI [92718W]	0.94
		2000		1.01
		1500	3000-1800K, 90+ CRI [93018W]	0.96
		2000		1.01

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

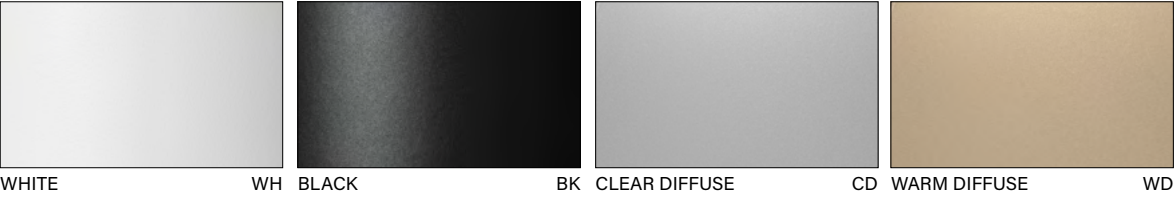
Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Color)

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

Finishes



STANDARD FINISHES



THE NATURALS (25% SCALE) - Available with Super Short Cone (DSS) only

