

ID+ 4.5" Trimless

LED DOWNLIGHT



solite lens option



clear diffuse



warm diffuse



black

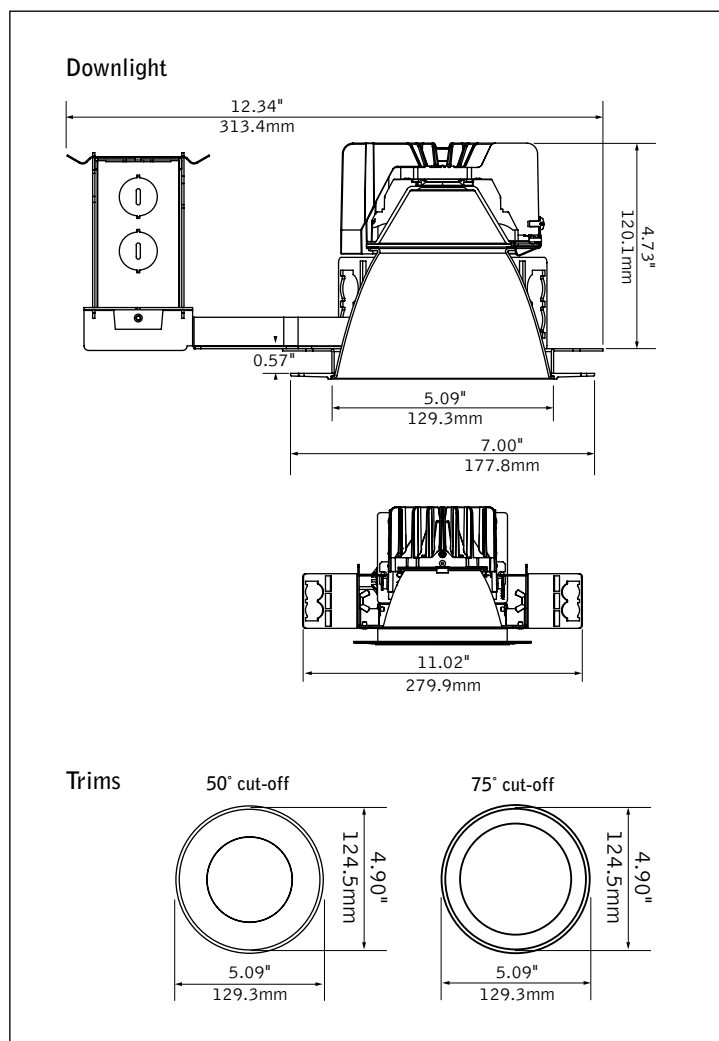


white



overlap 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.

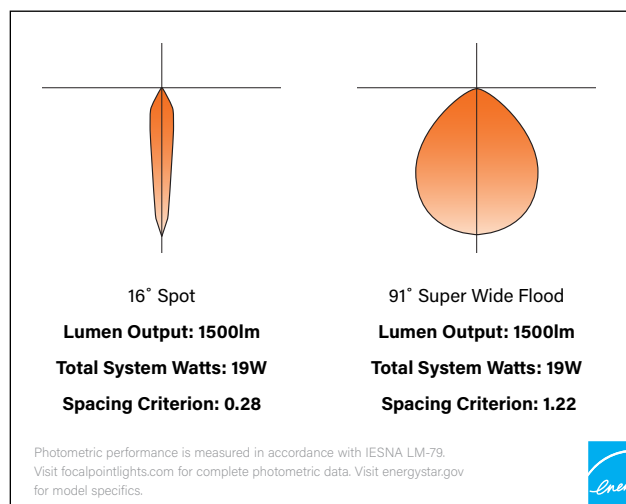
Right Light: Standard delivered lumen outputs 1000, 1500, 2000, 2500, and 3000.

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.

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

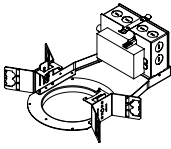
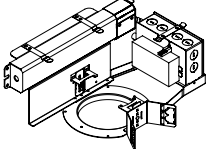
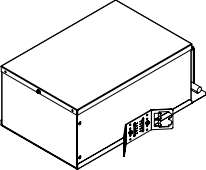
PERFORMANCE



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. 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 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. 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. The Naturals: 100% low VOC vinyl available with DSS only.

Optics

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

Optic	Cut-Off Degree	Lumen Output	Distribution Beam Spread				Spacing Criteria		
			SP	NFL	FL1	FL2	WFL	VWFL	SWFL
DN		1000-2500	16° .28	24° .40	35° .56	42° .66	51° .78	-	-
		3000	-	26° .44	36° .58	41° .64	52° .78	-	-
DSS		1000-2500	-	-	-	-	-	70° 1.00	91° 1.22
		3000	-	-	-	-	-	70° 1.00	91° 1.24

PERFORMANCE CHART* - see page 3.

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

HOUSING ORDERING		FLC4D
Housing Series		
ID+ 4.5" Round Downlight		FLC4D
Trim Type		RT
Round Trimless		RT
Color Options		
Standard White, 80 & 90 CRI		SW
Warm Dim		WDM
(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 & TW housings: 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, Non-IC		T
Thermally Protected, Non-IC Wood		TW
(Wood ceiling installation kit required)		
Factory Options		
Bar Hangers		BH
Chicago Plenum		CP
Emergency Battery**		EM
(Must order LC4EM trim. Not wet location, airtight or outdoor rated.)		
Outdoor Rated		OD
(LD1 driver only. IC housing 1500L max. See dimming Performance Chart on page 3.)		
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 Trimless		RT
Round Die-Cast Trimless		RDT
(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		DN
Super Short Cone with Solite Lens 75° cut-off		DSS
(Die-cast trim, RDT, with VWFL or SWFL optic 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		BK
White		WH
ACCESSORIES		
Wood Ceiling Installation Kit		LC4-WOOD-KIT
(One kit recommended per 10 downlights)		



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	1061	11	93
1500L	1595	19	83
 1500L	1433	25	57
2000L	2119	26	83
 2000L	2014	37	55
2500L	2562	32	80
3000L	3087	36	85

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 charts are provided to aid with estimation of lumen levels across options. Apply multipliers against ordered Lumen Output to estimate Delivered Lumens. An estimation should make use of all tables through consecutive application of three multipliers. Refer to IES files for most accurate photometric information

How To Use Lumen Multipliers

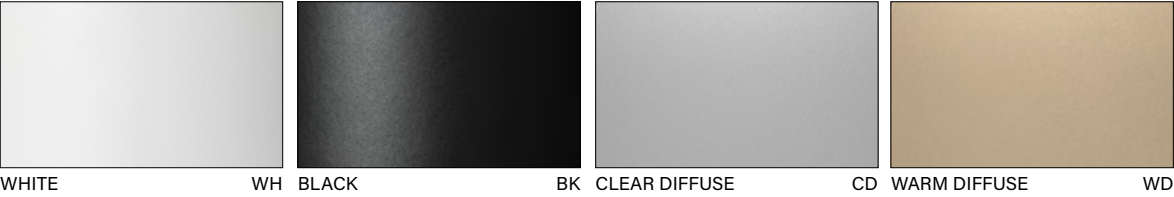
Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Color)

Example: LC4-RT-2000L-935K-DN-NFL-WH
(2000) x (0.83) x (1.03) x (1.00) ≈ 1710 lm (estimated delivered lumens)

Finishes



STANDARD FINISHES



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

