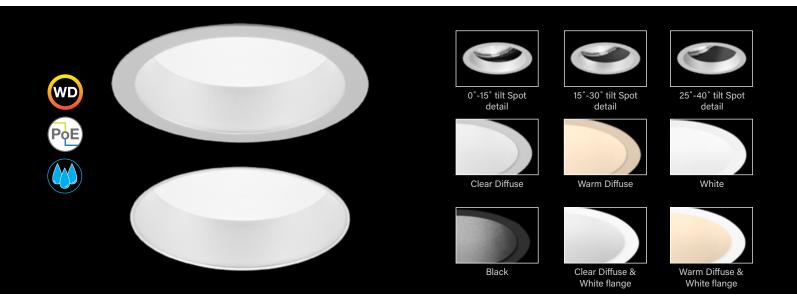
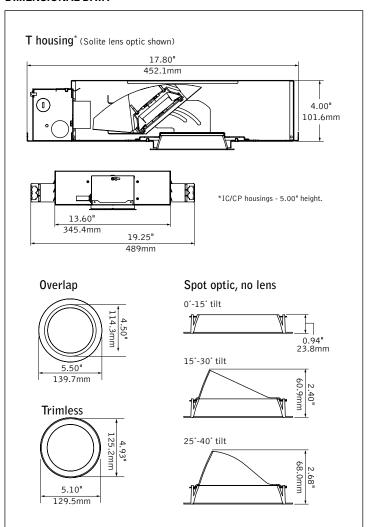
1D+4.5"





DIMENSIONAL DATA



FEATURES

12° beam is ideal for art and object accenting, additional beampreads up to 90° complement any application.

Allows for aiming with locking 40° vertical tilt and 364° rotation of light module.

Overlap and trimless options.

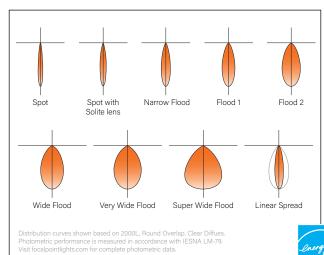
Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

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

Outdoor rating permits use in outdoor covered ceiling applications.

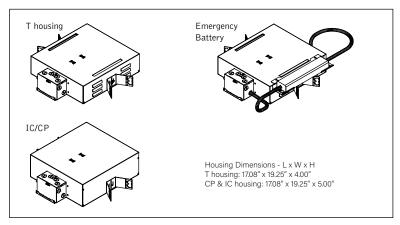
Available with The Naturals, a series of finishes that exude biophilic beauty.

DISTRIBUTIONS



ixture: project:

HOUSING DETAILS



HOUSING SPECIFICATIONS

LED System

Proprietary LED module with single light emitting source. May be specified in 2700K, 3000K, 3500K or 4000K in CRI>80, CRI>90, or CRI>97. Color accuracy within 2 SDCM. Warm Dim within 3-5 SDCM. Aluminum heat sink provides appropriate thermal management.

Construction

T 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 ½" emt. Order bar hangers as an accessory. Cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) ½" pry outs. UL & cUL listed for (8) #12 AWG (4 in, 4 out) 90°C conductors and feed through–branch wiring. Accommodates ceiling thicknesses from 0.5"–1.5" standard. For thicker ceiling consult factory. Fixture will not exceed 15lb.

Adjustment

Manual locking 40° vertical tilt and 364° rotation of light module.

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 Battery

Emergency output—7W for 90 minutes. Maximum mounting height: 19ft. For applications requiring higher than 2000L consult factory for maximum mounting height. Above ceiling access only.

Labels

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

Lumen Maintenance

Reported: L70 at >55,000 hours

Reported: L90 at >55,000 hours

Calculated: L70 at 204,000 hours

Calculated: 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.

TRIM SPECIFICATIONS

Aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is die-cast aluminum. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim. Trim is inherently air tight with Solite lens. Trims are self-flanged. Non-painted trim matches reflector finish. White or Black painted flange may also be specified. Spot distribution is offered with Solite lens and No lens options. No lens options with greater than 15° vertical tilt, feature a shroud to conceal internal components and maintain a premium aesthetic while providing a narrow spot distribution. The Naturals: 100% low VOC vinyl.

Optics

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

Lumen range	<u>Distribution Beam Spread</u> Spacing Criteria								
	SP	SP with Solite	NFL	FL1	FL2	WFL	VWFL	SWFL	LS
1000 -	12.6°	17.7°	24.0°	33.6°	48.0°	60.4°	72.2°	86.4°	22.8° x 51.8°
2000	0.22	0.32	0.42	0.56	0.76	0.88	1.00	1.24	0.42 x 0.80
2500 -			24.9°	37.1°	44.1°	56.7°	74.2°	87.4°	28.6° x 53.9°
4000	-	-	0.42	0.60	0.70	0.86	1.04	1.26	0.52 x 0.84

PERFORMANCE CHART - See page 3

HOUSING ORDERING		FI CC4
Housing Series ID+ 4.5" Round Housing	FLCS4	FLCS4
Trim Type Round Overlap Round Trimless	RO RT	
Lumen Output	nı	
1000 Lumens 1500 Lumens	1000L 1500L	
2000 Lumens	2000L	
2500 Lumens 3000 Lumens	2500L 3000L	
3500 Lumens	3500L	
4000 Lumens (Not available with 97+ CRI)	4000L	
Color Temperature		
(Add 9 for 90 CRI or H for 97 CRI. Leave blank for 80 CRI. CRI 97: T & TW housing 3500L max, IC housing 2000L.)		
2700K, 80/90/97+ CRI 3000K, 80/90/97+ CRI	_27K 30K	
3500K, 80/90/97+ CRI	_35K	
4000K, 80/90/97+ CRI Warm Dim: 2700-1800K, 90+ CRI*	_40K 92718W	
Warm Dim: 3000-1800K, 90+ CRI*	93018W	
*(1000L, 1500L, 2500L only. IC, UNV or LV available with 1000L & 1500L only.)		
Distribution	SP	
Spot (2000L max.) Narrow Flood	NFL	
Flood 1 Flood 2	FL1 FL2	
Wide Flood	WFL	
Very Wide Flood	VWFL	
Super Wide Flood Linear Spread Lens	SWFL LS	
Voltage		
UNV 120/277 Volt (L11 & LD1 2500L max., LZ1, DZ1, D11, LFP 2000L max.,	UNV	
LH1 1500L max.) 120 Volt	120	
277 Volt	277	
Low Voltage (2500L max.)	LV	
Driver		
0-10V - 0% Dimming 0-10V - 1% Dimming	LZ1 L11	
0-10V - 10% Dimming	LD1	
Forward Phase (120V only) Low Voltage, PoE Compatible	LFP LVN	
(No driver, LV Voltage only. Not available with EM.) Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1	
DALI - 0% Dimming	DZ1	
DALI - 1% Dimming	D11	
Housing Type IC rated	IC	
IC rated (L11, LD1 & LVN 2500L max. LZ1, DZ1, D11 & LFP 2000L max. LH1 1500L max.)		
Non-IC (LZ1, LH1, DZ1, D11 3000L max. LFP 3500L max.)	Т	
Non-IC Wood	TW	
(RT only, requires Trimless Wood Kit.) Factory Options		
Bar Hangers	ВН	
Chicago Plenum Emergency Battery with Remote Test Switch	CP EMR	
(T housing only. Not available with Warm Dim. Above ceiling access only.)		
Outdoor Rated (LD1 driver only. IC housing 2500L max. Solite lens optic only. See	OD	
dimming Performance Chart on page 3.)		
TRIM ORDERING		
Aperture 4.5" Round Aperture	LCS4	LCS4
Trim Type		
Round Die-Cast Overlap Round Die-Cast Trimless	RDO RDT	
Optic (SP distribution available with all Optic options,		
all other distributions SL only)		
Solite Lens	SL SP00	
Spot Optic, no lens, for 0°-15° tilt Spot Optic, no lens, for 15°-30° tilt	SP30	
Spot Optic, no lens, for 25°-40° tilt Color	SP40	
(See finishes page for The Naturals options)		
Clear Diffuse Warm Diffuse	CD WD	
Black	BK WH	
White Optional Flange Finish	VVII	
(Overlap CD & WD finish only.) (For matching finishes leave blank)		
Black Painted White Painted	BP WP	
ACCESSORIES		
Distribution Kit	FLCS4	
(Order kits to change distribution in field. Add Distribution code from above. Example FLCS4-SP)		
Spot Optic Title Kit (Add code for desired title degree -	KIT-	
Spot Optic Title Kit (Add code for desired title degree - 15"-30" = SP30, 25"-40" = SP40, Both = SPB)	KIT- FLCS4	

Trimless Wood Kit FLCS4-

(One kit suggested per 10 units) WOOD-KIT

HOUSING ORDERING

4.5" ROUND ADJUSTABLE DOWNLIGHT PERFORMANCE TABLE

Lumen Output		Delivered Lumens	System Watts	LPW
	1000L	1042	11.5	91
WD	1000L	847	14.6	58
	1500L	1508	16.8	90
WD	1500L	1519	23.5	65
	2000L	2025	23.7	85
	2500L	2561	27.2	94
WD	2500L	2317	37.1	62
	3000L	3073	32.5	95
	3500L	3539	38.1	93
	4000L	4113	44.3	93

Based on SL optic, 3500K, 80CRI, Narrow Flood, Clear Diffuse. Warm Dim based on 3000 - 1800K, 90 CRI. Overlap and trimess offer identical performance. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE TABLE

Lumen Output	Minimum Dimming Level
1000L	13%
1500L	10%
2000L	10%
2500L	10%
3000L	10%
3500L	10%
4000L	10%

4.5" ROUND ADJUSTABLE DOWNLIGHT CBCP CHART

Lumen Output	Distribution	Beamspread	Center Beam Candlepower (CBCP)
	SP	12.6°	28962
	SP with Solite lens	17.7°	12854
	NFL	24.0°	8035
	FL1	33.6°	4276
2000L	FL2	48.0°	2518
	WFL	60.4°	1719
	VWFL	72.2°	1332
	SWFL	86.4°	985
	LS	22.8° x 51.8°	4327

4.5" ROUND DOWNLIGHT LUMEN MULTIPLIER TABLE

Color Temperature & CRI¹

Color Options	Lumen Output	Color Temperature & CRI	Multiplier		
		2700K, 80+ CRI [27K]	0.92		
		2700K, 90+ CRI [927K]	0.79		
		2700K, 97+ CRI [9727K]	2700K, 90+ CRI [927K] 0.79 2700K, 97+ CRI [9727K] 0.67 3000K, 80+ CRI [9727K] 0.98 3000K, 90+ CRI [930K] 0.83 3000K, 97+ CRI [9730K] 0.72 3500K, 80+ CRI [35K] 1.00 3500K, 90+ CRI [935K] 0.82 3500K, 90+ CRI [9735K] 0.73 4000K, 80+ CRI [40K] 1.01 4000K, 90+ CRI [940K] 0.84 4000K, 97+ CRI [9740K] 0.76		
		3000K, 80+ CRI [30K]			
		3000K, 90+ CRI [930K]			
Standard White	All Outroute	3000K, 97+ CRI [9730K]	0.72		
Standard vynite	All Outputs	3500K, 80+ CRI [35K]	0.72 1.00 0.82 0.73		
		3500K, 90+ CRI [935K]	0.82		
		3500K, 97+ CRI [9735K]	0.73		
		4000K, 80+ CRI [40K]	1.01		
		4000K, 90+ CRI [940K]	0.92 0.79 0.67 0.98 0.83 0.72 1.00 0.82 0.73 1.01 0.84		
		4000K, 97+ CRI [9740K]	0.76		
	1000L	2700-1800K, 90+ CRI [92718W] 0.			
	1000L	3000-1800K, 90+ CRI [93018W]	0.85		
WD NA Dies	1500L	2700-1800K, 90+ CRI [92718W]	0.79		
Warm Dim	1000L	3000-1800K, 90+ CRI [93018W]	1.01		
	25001	2700-1800K, 90+ CRI [92718W]	0.76		
	20UL	3000-1800K, 90+ CRI [93018W]	0.93		

^-	3
CO	10I "

Trim	Color	Multiplier
	Clear Diffuse [CD]	1.00
All	Warm Diffuse [WD]	0.98
All	White [WH]	1.01
	Black [BK]	0.93

Round Overlap Round Trimless Distribution² Multiplier Multiplier 1000L -2500L -1000L -2500L -Trim Distribution 2000L 4000L 2000L 4000L Spot [SP] 1.08 1.08 Spot with Solite lens [SP] 1.06 1.06 Narrow Flood [NFL] 1.01 1.03 1.01 1.03 Flood 1 [FL1] 0.98 0.93 0.98 0.93 Round Overlap Flood 2 [FL2] 1.00 0.98 1.00 0.98 Wide Flood [WFL] 0.96 0.96 0.90 0.90 Very Wide Flood [VWFL] 0.93 0.93 0.91 0.91 Super Wide Flood [SWFL] 0.89 0.88 0.89 0.88 Linear Spread [LS] 0.98 0.97 0.98 0.97

How To Use Lumen Multipliers

Formula

(Lumen Output Value) x (Color Temperature & CRI¹) x (Distribution²) x (Color³)

Example:

FLCS4-RO-2000L-935K-FL1-LCS4-RDO-WH (2000) x (0.82) x (.98) x (1.01) \approx 1623lm (estimated delivered lumens)

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.

Finishes



STANDARD FINISHES



THE NATURALS (25% SCALE)

