

ID+ 2.5" x 2.5"

OVERLAP & TRIMLESS LED DOWNLIGHTS



Solite lens



Clear diffuse



Warm diffuse



White painted



Black painted



Optional painted flange

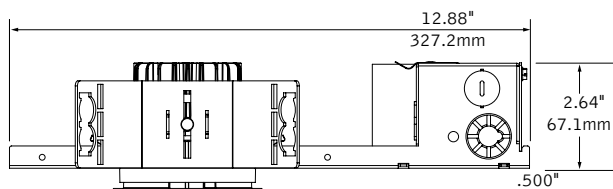


The Naturals collection - Walnut shown

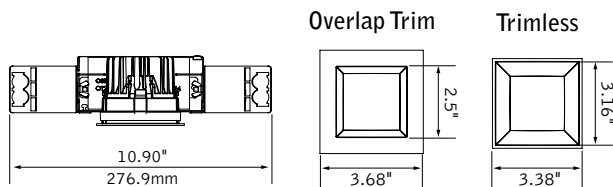


Wall Wash companion

DIMENSIONAL DATA



Field adjustability of ceiling thickness from 0.5" - 1.5"
Housing height with DALI, Lutron & LZ1 drivers is 3.0"



FEATURES

Less than 2.64" low profile housing available.

60° and 75° cut-off reflector options available.

25° to 90° beam spreads support accent lighting, task lighting and general illumination

Solite lens with die-cast trim delivers 70° or 90° beam spread options.

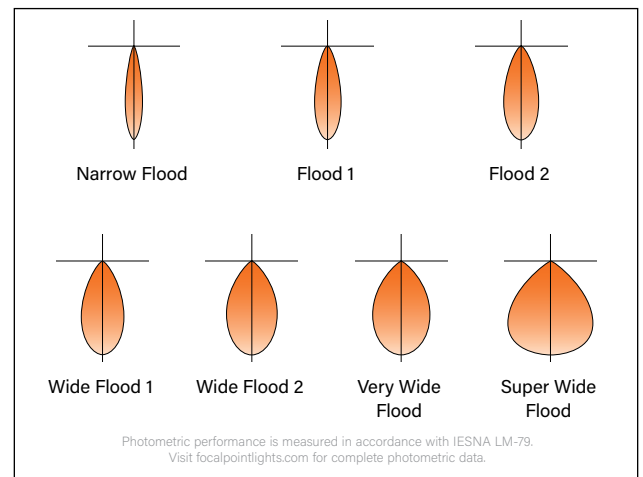
Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

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

Configurations available for Title 24 JA8 High Efficacy Lighting compliance.

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

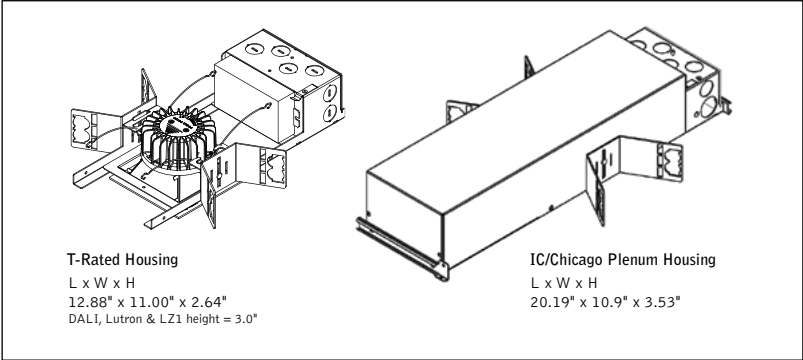
DISTRIBUTIONS



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. Restrictive airflow per ASTM-E283. LC22AT trim is inherently airtight and may be used to obtain airtight rating when used with IC-rated or thermally protected, non-IC (T) housings. 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. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 1.5" thickness. Fixture will not exceed 5 lb.

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

Above ceiling access required, overlap trim only. Emergency output - 7W for 90 minutes. Maximum mounting height: Clear Diffuse & White: 17.2ft. Black & Warm Diffuse: 15.5ft.

Labels

UL and cUL Listed. Suitable for Dry, Damp or Wet Locations, indoor use only. Specify Outdoor rated (OD) for outdoor recessed ceiling applications. Configurations available for Title 24 JA8 compliance, consult the JA8 High Efficacy Lighting Reference Guide for options. JA8 factory option must be specified to ensure Title 24 JA8 compliance.

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, or Warm Dimming (2700K-1800K and 3000K-1800K), CRI>80, >90 or 97. Color accuracy within 2 SDCM (Warm Dimming from 3-5 SDCM). Aluminum heat sink provides appropriate thermal management.

Aesthetics

Die-cast aluminum trims. Overlap trims are self-flanged.

Optics

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

Optic	Cut-Off Degree	Trim Type	Distribution Beam Spread Spacing Criteria							
			NFL	FL1	FL2	WFL1	WFL2	VWFL	SWFL	
DNS		Overlap	21° 0.36	33° 0.56	43° 0.68	53° 0.80	62° 0.90	-	-	
	60°	Trimless	22° 0.38	33° 0.56	44° 0.70	53° 0.82	64° 0.92	-	-	
DSS		Overlap	-	-	-	53° 0.86	65° 0.92	72° 1.02	84° 1.18	
	75°	Trimless	-	-	-	50° 0.78	62° 0.88	71° 1.00	91° 1.28	

PERFORMANCE TABLE - see page 3.

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

HOUSING ORDERING			FLC22D
Housing Series			
ID+ 2.5" Square			FLC22D
Trim Type			
Square Overlap			SDO
Square Trimless			SDT
Color Options			
Standard White, 80 & 90 CRI			SW
High 97 CRI			HC
Warm Dim			WDM
(900L only. UNV, LV & EMR not available.)			
Lumen Output			
500 Lumen (L1, LD1 & LVN only)			500L
700 Lumen (Not available with LFP or LH1)			700L
900 Lumen (Not available with LH1 or LFP)			900L
1100 Lumen			1100L
1300 Lumen			1300L
1500 Lumen			1500L
1700 Lumen			1700L
1900 Lumen (L1, LD1 or LH1 only)			1900L
Voltage			
120/277 Volt			UNV
(IC-rated housing: SW & HC: 1500L max. T & TW housings: SW: 1100L max, HC: 900L max.)			
120V			120
277V			277
Low Voltage			LV
(IC-rated housing: SW & HC: 1500L max. T & TW housings: SW: 1100L max, HC: 900L max.)			
Control System & Dimming Level			
0-10V <1% Dimming			LZ1
0-10V - 1% Dimming			L11
0-10V - 10% Dimming			LD1
Low Voltage, PoE Compatible			LVN
(No driver. Not available with EMR. LV voltage only.)			
Forward Phase (120V only)			LFP
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming			LH1
DALI <1% Dimming			DZ1
DALI - 1% Dimming			D11
Housing Type			
IC Rated / Airtight (1500L max)			IC
Thermally Protected, Non-IC			T
Thermally Protected, Non-IC Wood			TW
(Trimless only. Wood kit required)			
Factory Options			
Bar Hangers			BH
Chicago Plenum			CP
Emergency Battery - Remote test switch			EMR
(Overlap trim & T Housing only. Above ceiling access.)			
Outdoor Rated			OD
(LD1 driver and T-rated housing only. Not available with CP or EMR. See dimming performance table on page 3.)			
Title 24 / JA8 Compliant			JA8
(Consult JA8 Reference Guide for available options.)			
TRIM & LED MODULE			
Aperture			
2.5" Square Reflector			LC22
2.5" Square Airtight Reflector			LC22AT
Trim Type			
Square Overlap			SDO
Square Trimless			SDT
Lumen Output			
Trim & housing output must match. See options above.			
Color Temperature			
(Add 9 for 90 CRI or H for 97 CRI. Leave blank for 80 CRI. Examples: 2700K, 97 CRI = H27K; 2700K, 80 CRI = 27K.)			
2700K, 80/90/97+ CRI			_27K
3000K, 80/90/97+ CRI			_30K
3500K, 80/90/97+ CRI			_35K
4000K, 80/90/97+ CRI			_40K
Warm Dim: 2700-1800K, 90+ CRI			92718W
Warm Dim: 3000-1800K, 90+ CRI			93018W
Optic			
Short Cone with 60° cut-off			DNS
Super Short Cone with Solite Lens 75° cut-off			DSS
(VWFL or SWFL only)			
Distribution			
Narrow Flood (DNS Optic only)			NFL
Flood 1 (DNS Optic only)			FL1
Flood 2 (DNS Optic only)			FL2
Wide Flood			WFL1
Wide Flood			WFL2
Very Wide Flood (DSS Optic only)			VWFL
Super Wide Flood (DSS Optic only)			SWFL
Finish			
(See finishes page for The Naturals options)			
Clear Diffuse			CD
Warm Diffuse			WD
Black			BK
White			WH
Optional Flange Finish			
(Overlap CD & WD finish only. For matching finishes leave blank.)			
Black Painted			BP
White Painted			WP
Factory Options			
Title 24 / JA8 Compliant (Trim & housing must match.)			JA8
ACCESSORIES			
Trimless Wood Ceiling Installation Kit			LC22-
(One kit recommended per 10 downlights)			WOOD-KIT

2.5" SQUARE DOWNLIGHT PERFORMANCE TABLE

Lumen Output	Delivered Lumens	System Watts	LPW
500L	552	6.0	92
700L	747	7.6	98
 900L	939	14.6	64
900L	937	9.3	101
1100L	1145	11.2	102
1300L	1342	15.0	89
1500L	1573	17.3	91
1700L	1755	19.3	91
1900L	1966	21.8	90

Based on Overlap, Short cone, 3500K, 80 CRI, Flood 2, Clear Diffuse. WDM based on 3000 - 1800K, 90 CRI. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE TABLE

Lumen Output	Minimum Dimming Level
500L	25%
700L	18%
900L	14%
1100L	12%
1300L	10%
1500L	10%
1700L	10%
1900L	10%

2.5" SQUARE DOWNLIGHT LUMEN MULTIPLIER TABLE

Color Temperature & CRI

Trim Type	Optic	Color Temperature & CRI		Multiplier
ALL	ALL	2700K	80+ CRI [27K]	0.92
			90+ CRI [927K]	0.79
			97 CRI [H27K]	0.67
		3000K	80+ CRI [30K]	0.98
			90+ CRI [930K]	0.83
			97 CRI [H30K]	0.72
		3500K	80+ CRI [35K]	1.00
			90+ CRI [935K]	0.82
			97 CRI [H35K]	0.73
		4000K	80+ CRI [40K]	1.01
			90+ CRI [940K]	0.84
			97 CRI [H40K]	0.76
		2700-1800K	90+ CRI [92718K]	0.99
		3000-1800K	90+ CRI [93018K]	1.04

Distribution

Trim Type	Optic	Distribution	Multiplier
Square Trimless [SDT]	Short Cone with 60° cut-off [DNS]	Narrow Flood [NFL]	1.04
		Flood 1 [FL1]	1.01
		Flood 2 [FL2]	1.03
		Wide Flood 1 [WFL1]	1.01
		Wide Flood 2 [WFL2]	0.88
		Wide Flood 1 [WFL1]	1.02
Square Overlap [SDO]	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Wide Flood 2 [WFL2]	0.79
		Very Wide Flood [VWFL]	0.80
		Super Wide Flood [SWFL]	0.74
		Super Wide Flood [SWFL]	0.74
	Short Cone with 60° cut-off [DNS]	Narrow Flood [NFL]	1.04
		Flood 1 [FL1]	1.01
		Flood 2 [FL2]	1.03
		Wide Flood 1 [WFL1]	1.01
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Wide Flood 2 [WFL2]	0.88
		Wide Flood 1 [WFL1]	1.02
		Wide Flood 2 [WFL2]	0.79
		Very Wide Flood [VWFL]	0.80
		Super Wide Flood [SWFL]	0.74

Color

Trim Type	Optic	Color	Multiplier
ALL	Short Cone with 60° cut-off [DNS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.98
		White [WH]	1.07
		Black [BK]	0.88
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.99
		White [WH]	1.08
		Black [BK]	0.92
		Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.99
		White [WH]	1.08
		Black [BK]	0.92

How To Use Lumen Multipliers

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

Example:
LC22-SDO-SW-1100L-935K-DNS-FL1-WH

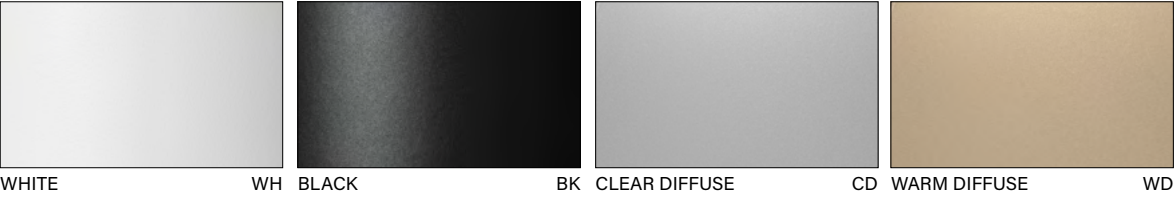
(1100) x (0.82) x (1.01) x (1.07) ≈ 1062lm
(estimated delivered lumens)

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)

