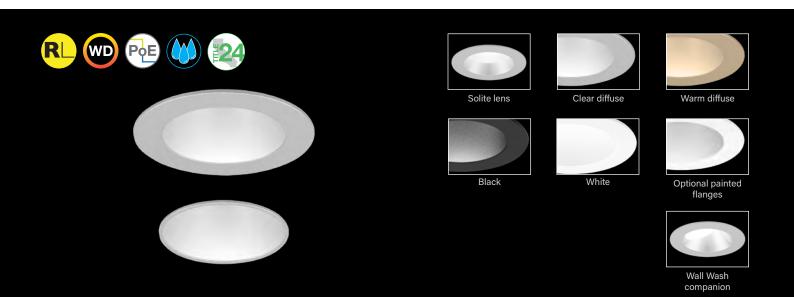
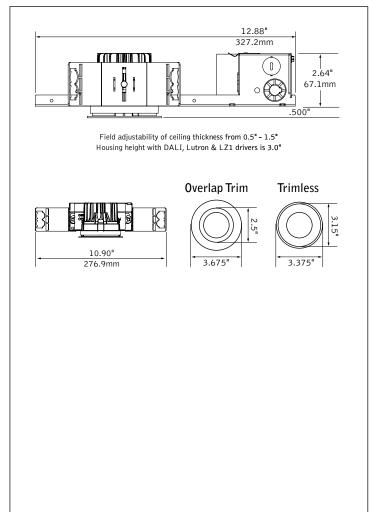
# ID+2.5" OVERLAP & TRIMLESS LED DOWNLIGHTS





## DIMENSIONAL DATA



## FEATURES

Less than 2.64" low profile housing available.

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

 $25^\circ$  to  $90^\circ$  beam spreads support accent lighting, task lighting and general illumination

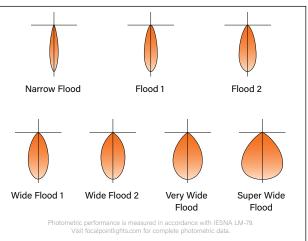
Solite lens with die-cast trim delivers 70  $^{\circ}$  or 90  $^{\circ}$  beam spread options.

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

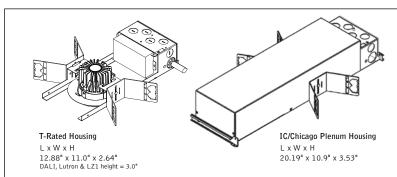
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Configurations available for Title 24 JA8 High Efficacy Lighting compliance.

#### DISTRIBUTIONS



### 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. LC2AT 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  $V^2$ " 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) 12" pry outs. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 1.5" thickness. For thicker ceiling consult factory. 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 speficied 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 typi	cal 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.

Opt	Optic Cut-Off Trim		Distribution Beam Spread   Spacing Criteria							
	Deg	gree	Туре	NFL	FL1	FL2	WFL1	WFL2	VWFL	SWFL
DN	。   _		Overlap	20° 0.36	33°   0.54	42°   0.68	52°   0.80	64°   0.92	-	-
DN		0°	Trimless	21°   0.38	33°   0.54	43°   0.68	51°   0.78	62°   0.88	-	-
DSS			Overlap	-	-	-	52°   0.86	61°   0.88	70°   1.02	81°   1.14
033		5°	Trimless	-	-	-	52°   0.84	65°   0.90	69°   0.98	89°   1.26

#### PERFORMANCE TABLE - see page 3.

#### HOUSING ORDERING Housing Series ID+ 2.5" Round FLC2D FLC2D Trim Type RDO Round Overlap Round Trimless RDT **Color Options** Standard White, 80 & 90 CRI SW High 97 CRI HC WDM Warm Dim (900L only. UNV, LV & EMR not available. Lumen Output 5001 500 Lumen (L11, LD1 & LVN only) 700L 700 Lumen (Not available with LFP or LH1) 900L 900 Lumen (Not available with LFP or LH1) 1100L 1100 Lumen 1300L 1300 Lumen 1500L 1500 Lumen 1700L 1700 Lumen 1900L 1900 Lumen (L11, LD1 & LH1 only) Voltage UNV 120/277 Volt (IC housing: SW & HC: 1500L max T & TW housings: SW 1100L max., HC: 900L max 120 120V 277 277V LV Low Voltage (IC housing: SW & HC: 1500L max. T & TW housings: SW 1100L max., HC: 900L max.) **Control System & Dimming Level** 171 0-10V <1% Dimming 0-10V - 1% Dimming L11 0-10V - 10% Dimming I D1 Low Voltage, PoE Compatible LVN (No driver. Not available with EMR. LV voltage only.) I FP Forward Phase (120V only) LH1 Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming DALI <1% Dimming DZ1 D11 DALI - 1% Dimming **Housing Type** IC IC Rated / Airtight (1500L m Thermally Protected, Non-IC ΤW Thermally Protected, Non-IC Wood (Trimless o Wood kit n **Factory Options** BH Bar Hangers CP Chicago Plenum EMR Emergency Battery -Remote test switch (Overlap trim & T Housing only. Above ceiling access OD Outdoor Rated (LD1 driver and T-rated housing only. Not available with CP or EMR See dimming performance table on page 3.) JA8 Title 24 / JA8 Compliant (Consult JA8 Refe **TRIM & LED MODULE** Aperture 1 C2 2.5" Round Reflector 2.5" Round Airtight Reflector LC2AT Trim Type RDO Round Overlap RDT Round Trimless Lumen Output Trim & housing output must **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 40K 4000K, 80/90/97+ CRI 92718W Warm Dim: 2700-1800K, 90+ CRI 93018W Warm Dim: 3000-1800K, 90+ CRI Optic Short Cone with 60° cut-off DNS DSS Super Short Cone with Solite Lens 75° cut-off Distribution NFL Narrow Flood (DNS only) Flood (DNS only) FL1 Flood (DNS only) FL2 Wide Flood WFL1 WFL2 Wide Flood VWFI Very Wide Flood (DSS only) Super Wide Flood (DSS only) SWFL Finish CD Clear Diffuse WD Warm Diffuse Black BK WH White **Optional Flange Finish** (Overlap CD & WD finish only. For matching fi BP Black Painted WP White Painted **Factory Options** JA8 Title 24 / JA8 Compliant (Trim & housing must match.) ACCESSORIES I C2-

Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights) UC2-WOOD-KIT

## 2.5" ROUND DOWNLIGHT PERFORMANCE TABLE

Lur	nen Output	Delivered Lumens	System Watts	LPW
	500L	513	6	86
	700L	756	8.2	92
WD	900L	880	14.6	60
	900L	929	9.9	94
	1100L	1139	11.9	96
	1300L	1354	16.2	84
	1500L	1527	18.1	84
	1700L	1746	20.7	84
	1900L	1949	23.3	84

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE TABLE

Lumen Output	Minimum Dimming Level
500L	25%
700L	17%
900L	13%
1100L	10%
1300L	10%
1500L	10%
1700L	10%
1900L	10%

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%

## 2.5" ROUND DOWNLIGHT LUMEN MULTIPLIER TABLE

## Color Temperature & CRI

Trim Type	Optic	Color Tempe	rature & CRI	Multiplier
			80+ CRI [27K]	0.92
		2700K	90+ CRI [927K]	0.79
			97 CRI [H27K]	0.67
			80+ CRI [30K]	0.98
		3000K	90+ CRI [930K]	0.83
			K 90+ CRI [927K] 97 CRI [H27K] 80+ CRI [30K] 97 CRI [H30K] 97 CRI [H30K] 97 CRI [H30K] 97 CRI [935K] 97 CRI [H35K] 80+ CRI [40K] 97 CRI [40K] 97 CRI [940K] 97 CRI [H40K] 97 CRI [92718K]	0.72
ALL	ALL		80+ CRI [35K]	1.00
ALL	ALL	3500K	90+ CRI [935K]	0.82
			97 CRI [H35K]	0.92 0.79 0.67 0.98 0.83 0.72 1.00
			80+ CRI [40K]	1.01
		4000K	90+ CRI [940K]	0.84
			97 CRI [H40K]	0.76
		2700-1800K	90+ CRI [92718K]	0.93
		3000-1800K	90+ CRI [93018K]	0.98

#### Distribution

Trim Type	Optic	Distribution	Multiplier
		Narrow Flood [NFL]	1.05
		Flood 1 [FL1]	0.99
	Short Cone with 60° cut-off [DNS]	Flood 2 [FL2]	1.03
		Wide Flood 1 [WFL1]	1.00
Round Trimless [RDT]		Wide Flood 2 [WFL2]	0.91
		Wide Flood 1 [WFL1]	1.07
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Wide Flood 2 [WFL2]	0.82
		Very Wide Flood [VWFL]	0.85
		Super Wide Flood [SWFL]	0.75
		Narrow Flood [NFL]	1.05
		Flood 1 [FL1]	0.99
	Short Cone with 60° cut-off [DNS]	Flood 2 [FL2]	1.03
		Wide Flood 1 [WFL1]	1.00
Round Overlap [RDO]		Wide Flood 2 [WFL2]	0.91
		Wide Flood 1 [WFL1]	1.07
	Super Short Cone with Solite Lens with 75° cut-off [DSS] Wide Flood 2 [WFL2]   Very Wide Flood [VWFL]	Wide Flood 2 [WFL2]	0.82
		Very Wide Flood [VWFL]	0.85
		Super Wide Flood [SWFL]	0.75

#### Color

Trim Type	Optic	Color	Multiplier
		Clear Diffuse [CD]	1.00
	Chart Case with CO <sup>®</sup> aut off [DNC]	Warm Diffuse [WD]	0.99
	Short Cone with 60° cut-off [DNS]	White [WH]	1.08
		Black [BK]	0.90
ALL		Clear Diffuse [CD]	1.00
	Super Short Cone with Solite Lens with	Warm Diffuse [WD]	0.98
		White [WH]	1.08
		Black [BK]	0.90

## How To Use Lumen Multipliers

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

#### Example:

LC2-RDO-SW-1100L-935K-DNS-FL1-WH

(1100) x (0.83) x (0.99) x (1.08) ≈ 976lm (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,