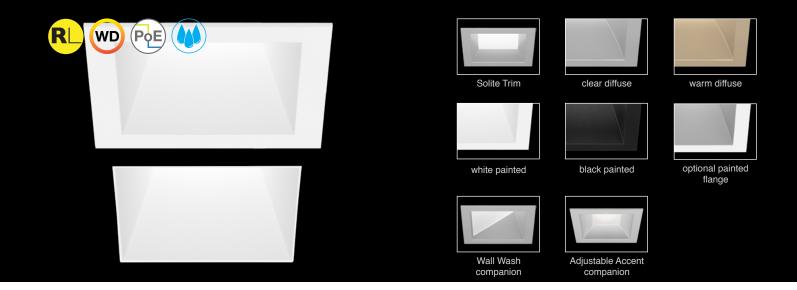
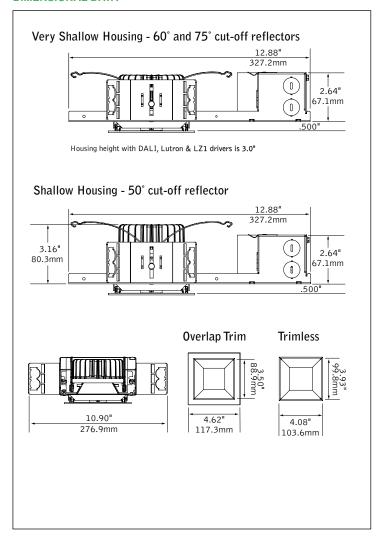
# ID+ 3.5" x 3.5" overlap & trimless led downlights





#### **DIMENSIONAL DATA**



#### **FEATURES**

Less than 2.64" low profile housing available.

Field adjustability of ceiling thickness from 0.5" - 1.5".

50°, 60° and 75° cut-off reflector options available.

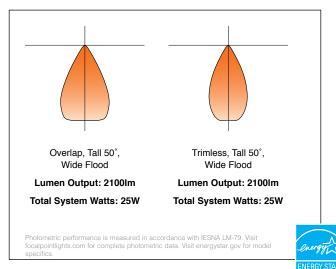
Outdoor rating permits use in outdoor covered ceiling applications.

Solite lens with die-cast trim allows for a coordinated aesthetic with ID+ 3.5" Adjustable Accent and delivers 70° or 90° beam spread options.

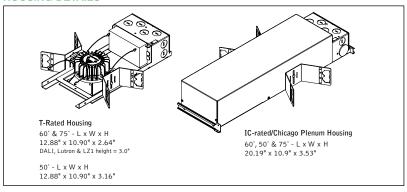
Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

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

#### **PERFORMANCE**



#### **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. 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. For thicker ceiling consult factory. Fixture will not exceed 5 lb. Trim is inherently airtight and may be used to obtain airtight rating when used with IC-rated or thermally protected, non-IC (T) housings.

#### 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 ceilng access required. Overlap trim only. Emergency output - 7W for 90 minutes. Maximum mounting height — Clear Diffuse & White: 22.5ft. Black & Warm Diffuse: 15.3ft.

#### Lahels

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

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. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Color accuracy within 2 SDCM (Warm Dimming from 3-5 SDCM). Aluminum heat sink provides appropriate thermal management.

#### **Aesthetics**

Die-formed aluminum reflector ensures glare free optics. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim.

#### Optics

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

Optic	Cut-Off	Trim	Distribution Beam Spread I Spacing Criteria						
	Degree	Type	NFL	FL1	FL2	WFL	VWFL	SWFL	
DNT	√ 50°	Overlap		34°   0.56				-	
DIVI		Trimless	24°   0.41	34°   0.56	45°   0.70	58°   0.86	66°   0.99	-	
DNS	60°	Overlap		34°   0.56			72°   1.01	-	
סווט	60	Trimless	24°   0.40	34°   0.56	45°   0.70	60°   0.88	69°   1.07	-	
DCC	/ 75°	Overlap	-	-	-	-	69°   0.99	92°   1.21	
DSS	/5	Trimless	-	-	-	-	72°   0.99	92°   1.26	

#### PERFORMANCE TABLE - see page 3.

Color T  (Add 9 for 90 CRI or H for 97 CRI Leave Examples: 2700K, 97 CRI = H27K. 2700K 2700K, 80 3000K, 80 3500K, 80 4000K, 80 Warm Dim: 2700-180 Warm Dim: 3000-180	or less. provides	00K), CRI>8 COI) of 3.3 m heat sink	on index ( . Aluminur	at M
Short Cone with Super Short Cone with Solite Le			s image.	i k
. I		ing Criteria	ad I Spac	or
14	SWFL	VWFL	WFL	
Very	-	64°   0.97	52°   0.85	)
Super Wide Flood	-	66°   0.99	58°   0.86	)
C W	-	72°   1.01	59°   0.86	)
V	-	69°   1.07	60°   0.88	)
Optional Fla	92°   1.21	69°   0.99	-	
(Overlap CD & WD finish only) (For matching fini BI W	92°   1.26	72°   0.99	-	
Wood Ceiling In: (One kit recommended pe	ces. Refer to	nge qualify for th / up to 200 pied de for complete	rogram. 5-day	

Housing Series ID+ 3.5" Square	FLC33D	_FLC33D_
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Standard White, 80 & 90 CRI High 97 CRI	SW HC	
Warm Dim (1500L only. UNV, LV & EMR not available.)  Lumen Output	WDM	
700 Lumen (Not available with Lutron or LFP) 900 Lumen (Not available with LFP) 1100 Lumen 1300 Lumen 1500 Lumen 1700 Lumen 1900 Lumen 2100 Lumen	700L 900L 1100L 1300L 1500L 1700L 1900L	
Voltage	2100L	
120/277 Volt (IC-rated housing: SW - 1700lm max., HC - 1500lm max. T-rated & TW housings: SW - 1100lm max., HC - 900lm max.)	UNV 120	
277V (T-rated housing only) Low Voltage (IC-rated housing: SW - 1700lm max., HC - 1500lm max. T-rated & TW housings: SW - 1100lm max, HC - 900lm max.)	277 LV	
Control System & Dimming Level		
0-10V - 0% Dimming 0-10V - 1% Dimming 0-10V - 10% Dimming	LZ1 L11 LD1 LVN	
Low Voltage, PoE Compatible (No driver. Not available with EMR. LV voltage only.) Forward Phase (120V only)	LFP	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming Lutron 5-Series EcoSystem (LDE5) - 5% Dimming Lutron Hi-Lume - Forward Phase (120V only) -	LH1 LU5 LTE	
1% Dimming DALI - 0% Dimming DALI - 1% Dimming	DZ1 D11	
Housing Type IC-Rated / Airtight (LTE 1500lm max.)	IC	
Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood (wood kit required)	TW	
Factory Options Bar Hangers	ВН	
Chicago Plenum Emergency Battery - Remote test switch	CP EMR	
Emergency Battery - Remote test switch (Overlap trim, SW or HC only. Not available with CP or IC-rated housing. Above ceiling access required.)		
Outdoor Rated (LD1 driver and T-rated housing only. Not available with CP or EMR. See dimming performance table on page 3.)	OD	
TRIM & LED MODULE		
Aperture		
3.5" Square Reflector	LC33	LC33
	LC33 SDO SDT	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match)	SDO SDT	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI	SDO SDT SW HC	
3.5" Square Reflector  Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Outbut	SDO SDT	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only)	SDO SDT SW HC	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1300 Lumen 1500 Lumen 1700 Lumen	SDO SDT SW HC WDM 700L 900L 1100L 1300L 1500L 1700L 1900L	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 11300 Lumen 1500 Lumen 1500 Lumen 1700 Lumen	SDO SDT SW HC WDM 700L 900L 1100L 1300L 1500L 1700L 1900L	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1100 Lumen 1300 Lumen 1700 Lumen	SDO SDT SW HC WDM 700L 900L 1100L 1300L 1500L 1700L 1900L 2100L 27K 30K 35K 40K 92718W	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1300 Lumen 1300 Lumen 1400 Lumen 1500 Lumen 1500 Lumen 1500 Lumen 1700 CRI CRI Leave blank for 80 CRI LEAN 1700 Lumen 1700 CRI CRI LEAN 1700 CRI CRI LEAN 1700 CRI	SDO SDT SW HC WDM 700L 900L 1100L 1300L 1500L 1700L 1900L 2100L 2100L 27K _30K _35K _40K 92718W 93018W	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500 only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1200 Lumen 1300 Lumen 1400 Lumen 1500 Lumen 1700 Lumen 1700 Lumen 1700 Lumen 1800 Lumen 1900 Lumen 1	SDO SDT SW HC WDM 700L 900L 1100L 1300L 1500L 1700L 1900L 2100L 2100L 27K 30K 35K 40K 92718W 93018W DNT DNS DSS	
3.5" Square Reflector Trim Type Square Die-Cast Overlap Square Die-Cast Trimless Color Options (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI Warm Dim (1500L only) Lumen Output (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1200 Lumen 1200 Lumen 1200 Lumen 1200 Lumen 1200 Lumen 1200 Lumen 1300 Lumen 1300 Lumen 1300 Lumen 1300 Lumen 1400 Lumen 1500 Lumen	SDO SDT  SW HC WDM  700L 900L 1100L 1300L 1500L	

#### **SQUARE DOWNLIGHT PERFORMANCE TABLE**

# OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE TABLE

Lumen Output	Delivered Lumens	System Watts	LPW	Lumen Output	Minimum Dimming Level
700L	722	8	91	700L	20%
900L	937	10	93	900L	16%
1100L	1130	12	96	1100L	13%
1300L	1355	16	84	1300L	10%
1500L	1539	18	86	1500L	10%
<b>₩</b> 1500L	1485	25	59	1700L	10%
1700L	1751	20	86	1900L	10%
1900L	1925	22	87	2100L	10%
2100L	2159	25	87		

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

# **SQUARE DOWNLIGHT LUMEN MULTIPLIER TABLE**

Col	or T	emp	eratu	re 8	& CRI
-----	------	-----	-------	------	-------

Trim Type	Optic	Color Tempe	rature & CRI	Multiplier
			80+ CRI [27K]	0.93
		2700K	90+ CRI [927K]	0.75
			97 CRI [H27K]	0.67
			80+ CRI [30K]	0.93
	ALL	3000K	90+ CRI [930K]	0.81
			97 CRI [H30K]	0.72
ALL			80+ CRI [35K]	1.00
ALL		3500K	90+ CRI [935K]	0.81
			97 CRI [H35K]	0.73
			80+ CRI [40K]	1.00
		4000K	90+ CRI [940K]	0.87
			97 CRI [H40K]	0.75
		2700-1800K	90+ CRI [92718K]	1.02
		3000-1800K	90+ CRI [93018K]	1.04

### Distribution

Trim Type	Optic	Distribution	Multiplier		
		Narrow Flood [NFL]	0.93		
		Flood 1 [FL1]	1.00		
	Tall Cone with 50° cut-off [DNT]	Flood 2 [FL2]	0.92		
		Wide Flood [WFL]	1.13		
Square Die-Cast Trimless [SDT]		Very Wide Flood [VWFL]	0.90		
Square Die-Cast Hilliess [SD1]		Narrow Flood [NFL]	0.95		
		Flood 1 [FL1]	1.03		
	Short Cone with 60° cut-off [DNS]	Flood 2 [FL2]	0.98		
		Wide Flood [WFL]	0.96		
		Very Wide Flood [VWFL]	1.24		
		Narrow Flood [NFL]	0.94		
		Flood 1 [FL1]	1.00		
	Tall Cone with 50° cut-off [DNT]	Flood 2 [FL2]	0.93		
		Wide Flood [WFL]	1.03		
Square Die-Cast Overlap [SDO]		Very Wide Flood [VWFL]	0.86		
Square Die-Cast Overlap [SDO]		Narrow Flood [NFL]	0.95		
		Flood 1 [FL1]	1.02		
	Short Cone with 60° cut-off [DNS]	Flood 2 [FL2]	0.97		
		Wide Flood [WFL]	0.94		
		Very Wide Flood [VWFL]	0.98		
Square Die-Cast Trimless [SDT]	Super Short Cone with Solite Lens	Very Wide Flood [VWFL]	1.07		
Square Die-Cast Hilliess [SD1]	with 75° cut-off [DSS]	Super Wide Flood [SWFL]	1.02		
Square Die Coat Overlan [CDO]	Super Short Cone with Solite Lens	Very Wide Flood [VWFL]	1.03		
Square Die-Cast Overlap [SDO]	with 75° cut-off [DSS]	Super Wide Flood [SWFL]	0.98		
Color					

Color			
Trim Type	Optic	Color	Multiplier
		Clear Diffuse [CD]	1.00
	Tall Cone with 50° cut-off [DNT]	Warm Diffuse [WD]	1.01
	Tail Colle Will 30 Cut-on [DIVI]	White [WH]	1.23
		Black [BK]	0.79
		Clear Diffuse [CD]	1.00
ALL	Chart Cana with 60° aut off [DNC]	Warm Diffuse [WD]	0.89
ALL	Short Cone with 60° cut-off [DNS]	White [WH]	0.97
		Black [BK]	0.83
		Clear Diffuse [CD]	1.00
	Super Short Cone with Solite Lens with	Warm Diffuse [WD]	0.99
	75° cut-off [DSS]	White [WH]	1.15
		Black [BK]	0.88

#### How To Use Lumen Multipliers

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

#### Example:

LC33-SDO-SW-1100L-935K-DNS-FL1-WH

 $(1100) \times (0.81) \times (1.02) \times (0.97) \approx 882 \text{Im}$ (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,