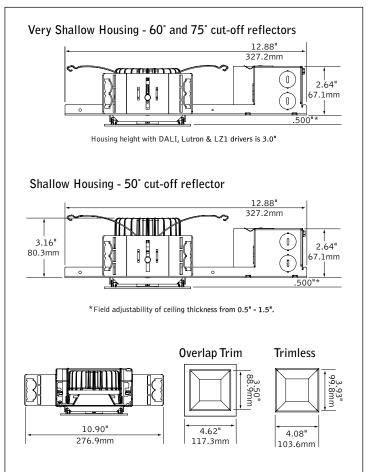




FOCAL POINT



## DIMENSIONAL DATA



# FEATURES

Less than 2.64" low profile housing available.

50°, 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 allows for a coordinated aesthetic with ID+ 3.5" Adjustable Accent and delivers 70° or 90° beam spread options.

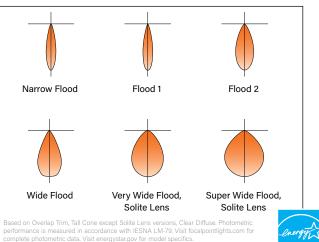
Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

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

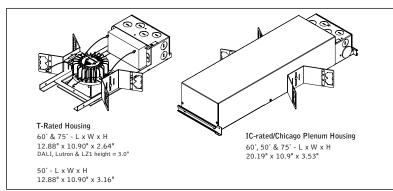
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

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

## DISTRIBUTIONS



## STANDARD WHITE HOUSING DETAILS



# 3.5" SQUARE DOWNLIGHT OPTICS

Optic Cut-Off Trim Type Distribution Beam Spread   S					read   Spac	pacing Criteria		
	Degree		NFL	FL1	FL2	WFL	VWFL	SWFL
DNT	∕ 50°	Overlap	25°   0.42	34°   0.56	44°   0.70 45°   0.70	52°   0.85	64°   0.97	-
	50	Trimless	24°   0.41	34°   0.56	45°   0.70	58°   0.86	66°   0.99	-
DNS	60°	Overlap	24°   0.41	34°   0.56	45°   0.70	59°   0.86	72°   1.01	-
		Trimless	24°   0.40	34°   0.56	45°   0.70	60°   0.88	69°   1.07	-
DSS	∠ 75°	Overlap	-	-	-	-	69°   0.99	92°   1.21
		Overlap Trimless	-	-	-	-	72°   0.99	92°   1.26

# 3.5" SQUARE DOWNLIGHT PERFORMANCE TABLES

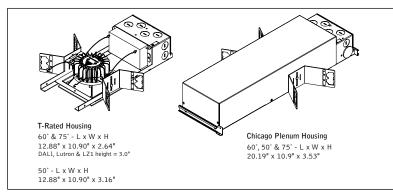
Based on Overlap, Tall Cone, Wide Flood, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

		STANDARD WHITE		
ССТ	Lumen Output	Delivered Lumens	System Watts	LPW
	700L	722	8	91
	900L	937	10	93
	1100L	1130	12	96
3500K,	1300L	1355	16	84
80CRI	1500L	1539	18	86
	1700L	1751	20	86
	1900L	1925	22	87
	2100L	2159	25	87

## **STANDARD WHITE**

HOUSING ORDERING		EL C 22D
Housing Series ID+ 3.5" Square Trim Type	FLC33D	_FLC33D_
Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Standard White, 80 & 90 CRI High 97 CRI	SW HC	
Lumen Output 700 Lumen (Not available with Lutron or LFP) 900 Lumen (Not available with LFP)	700L 900L	
1100 Lumen 1300 Lumen 1500 Lumen	1100L 1300L 1500L	
1700 Lumen 1900 Lumen	1700L 1900L	
2100 Lumen Voltage 120/277 Volt	2100L UNV	
(IC-rated housing: SW - 1700lm max, HC - 1500lm max. T-rated & TW housings: SW - 1100lm max, HC - 900lm max.) 120V	120	
277V Low Voltage (IC-rated housing: SW - 1700lm max, HC - 1500lm max.	277 LV	
T-rated & TW housings: SW - 1100lm max, HC - 900lm max.) Control System & Dimming Level	1 71	
0-10V <1% Dimming 0-10V - 1% Dimming 0-10V - 10% Dimming	LZ1 L11 LD1	
Low Voltage, PoE Compatible (No driver. Not available with EMR. LV voltage only.) Forward Phase (120V only)	LVN LFP	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming Lutron Hi-Lume - Forward Phase (120V only) -	LH1 LTE	
1% Dimming DALI <1% Dimming DALI - 1% Dimming	DZ1 D11	
Housing Type IC-Rated / Airtight (LTE 1500/m max.)	ĨĊ	
Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood (Trimless only. Wood kit required)	тw	
Factory Options Bar Hangers	BH	
Chicago Plenum Emergency Battery - Remote test switch (Overlap trim only. Not available with CP or	CP EMR	
IC-rated housing. Above ceiling access required.) Outdoor Rated (LD1 driver and T-rated housing only. Not available with	OD	
CP or EMR. See dimming performance table on page 5.) TRIM & LED MODULE		
Aperture 3.5" Square Reflector	LC33	LC33
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options (Trim & housing must match) Standard White, 80 & 90 CRI	SW	
High 97 CRI Lumen Output (Trim & housing output must match)	HC	
700 Lumen 900 Lumen	700L 900L	
1100 Lumen 1300 Lumen 1500 Lumen	1100L 1300L 1500L	
1700 Lumen 1900 Lumen 2100 Lumen	1700L 1900L 2100L	
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 3000K, 80/90/97+ CRI	_27K _30K	
3500K, 80/90/97+ CRI 4000K, 80/90/97+ CRI	_ <mark>35K</mark> _40K	
Optic Tall Cone with 50° cut-off Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off	DNT DNS	
Super Short Cone with Solite Lens 75° cut-off (VWFL or SWFL only) Distribution	DSS	
Narrow Flood Flood 1 Flood 2	NFL FL1 FL2	
Wide Flood Very Wide Flood	WFL VWFL	
Super Wide Flood (DSS Optic only) Finish	SWFL	
(See finishes page for The Naturals options) Clear Diffuse Warm Diffuse	CD WD	
Black White Ontional Flance Finish	BK WH	
Optional Flange Finish (Overlap CD & WD finish only) (For matching finishes leave blank) Black Painted	BP	
White Painted ACCESSORIES	WP	
Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights)	LC33- WOOD-KIT	

## WARM DIM HOUSING DETAILS



### 3.5" SQUARE DOWNLIGHT OPTICS

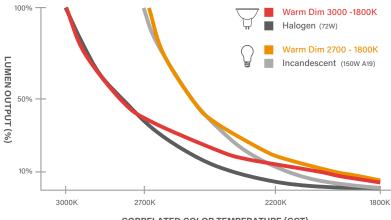
Optic	Cut-Off	Trim Type	Distribution Beam Spread   Spacing Criteria						
	Degree		NFL	FL1	FL2	WFL	VWFL	SWFL	
DNT 50°	Overlap	25°   0.42	34°   0.56	44°   0.70	52°   0.85	64°   0.97	-		
		Trimless	24°   0.41	34°   0.56	45°   0.70	58°   0.86	66°   0.99	-	
	60°	Overlap	24°   0.41	34°   0.56	45°   0.70	59°   0.86	72°   1.01	-	
		Trimless	24°   0.40	34°   0.56	45°   0.70	60°   0.88	69°   1.07	-	
DSS	75°	Overlap	-	-	-	-	69°   0.99	92°   1.21	
		Trimless	-	-	-	-	72°   0.99	92°   1.26	

## 3.5" SQUARE DOWNLIGHT PERFORMANCE TABLE

Based on Overlap, Tall Cone, Wide Flood, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

		ໜ WARM DIM		
CCT Range	Lumen Output	Delivered Lumens	System Watts	LPW
2700 - 1800K	1500L	1455	25	58
3000 - 1800K	1500L	1485	25	59

The 3000K to 1800K and 2700K to 1800K ranges mimic the black body curves of halogen and incandescent light sources, respectively.



CORRELATED COLOR TEMPERATURE (CCT)

#### WARM DIM HOUSING ORDERING **Housing Series** FLC33D ID+ 3.5" Square FLC33D Trim Type Square Die-Cast Overlap SDO Square Die-Cast Trimless SDT **Color Options** WDM Warm Dim WDM Lumen Output 1500L 1500 Lumen 1500L Voltage 120V 120 277V 277 **Control System & Dimming Level** 0-10V <1% Dimming LZ1 0-10V - 1% Dimming L11 0-10V - 10% Dimming LD1 Forward Phase (120V only) LFP Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming LH1 Lutron Hi-Lume - Forward Phase (120V only) -LTE 1% Dimming DALI <1% Dimming DZ1 DALI - 1% Dimming D11 Housing Type IC-Rated / Airtight IC Т

Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood ΤW (Trimless only. Wood kit required)

## **Factory Options**

Bar Hangers BH Chicago Plenum CP Outdoor Rated OD (LD1 driver and T-rated housing only. Not available with CP or EMR. See dimming performance table on page 5.)

Super Short Cone

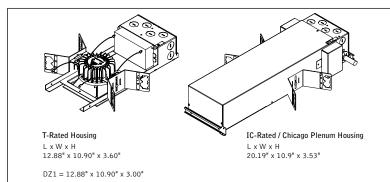
(Overlap CD & WD finish on

WD

## **TRIM & LED MODULE**

Aperture		LC33
3.5" Square Reflector	LC33	
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Warm Dim	WDM	WDM
Lumen Output 1500 Lumen	1500L	1500L
<b>Color Temperature</b> Warm Dim: 2700-1800K, 90+ CRI Warm Dim: 3000-1800K, 90+ CRI	92718W 93018W	
Optic Tall Cone with 50° cut-off Short Cone with 60° cut-off r Short Cone with Solite Lens 75° cut-off (VWFL or SWFL only)	DNT DNS DSS	
Distribution Narrow Flood 1 Flood 1 Flood 2 Wide Flood Very Wide Flood Super Wide Flood (DSS Optic only)	NFL FL1 FL2 WFL VWFL SWFL	
Finish (See finishes page for The Naturals options) Clear Diffuse Warm Diffuse Black White	CD WD BK WH	
Optional Flange Finish CD & WD finish only) (For matching finishes leave blank) Black Painted White Painted	BP WP	
40050005150		
ACCESSORIES Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights)	LC33- WOOD-KIT	

## **TUNABLE WHITE HOUSING DETAILS**



## 3.5" SQUARE DOWNLIGHT OPTICS

Optic Cut-Off Trim Type Distribution Beam Spre					ead   Spacing Criteria			
	Degree		NFL	FL1	FL2	WFL	VWFL	SWFL
DNT	∕ 50°	Overlap	25°   0.42	34°   0.56	44°   0.70	52°   0.85	64°   0.97	-
DNT		Trimless	24°   0.41	34°   0.56	45°   0.70	58°   0.86	66°   0.99	-
DNS	60°	Overlap	24°   0.41	34°   0.56	45°   0.70	59°   0.86	72°   1.01	-
		Trimless	24°   0.40	34°   0.56	45°   0.70	60°   0.88	69°   1.07	-
DCC		Overlap	-	-	-	-	69°   0.99	92°   1.21
DSS	~~~~ /5	Trimless	-	-	-	-	72°   0.99	92°   1.26

## 3.5" SQUARE DOWNLIGHT PERFORMANCE TABLES

Based on Overlap, Tall Cone, Wide Flood, Clear Diffuse. Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

🐨 TUNABLE WHITE								
сст	Lumen Output	Delivered Lumens	System Watts	LPW				
	700L	694	13	52				
2700K	900L	902	17	54				
(2700-5000K & 2700-6500K)	1100L	1112	21	53				
	1300L	1307	24	53				
1800K	700L	701	20	36				
(1800-4000K)	900L	894	25	36				

The Comfort (1800K-4000K), Preference (2700K-5000K), and Activity (2700K-6500K) ranges give specifiers the tools to enhance spaces, mood, and alertness.

## DAYLIGHT RANGE



1800K



TW TUNABLE WHITE		
HOUSING ORDERING Housing Series ID+ 3.5" Square	FLC33D	_FLC33E
<b>Trim Type</b> Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Tunable White: 1800-4000K (900L max. T-rated housings only.) Tunable White: 2700-5000K	1840T 2750T	
Tunable White: 2700-6500K Lumen Output 700 Lumen	2765T 700L	
900 Lumen 1100 Lumen 1300 Lumen	900L 1100L 1300L	
Voltage 120/277 Volt (2705T & 2765T only. IC housing only.) 120V	UNV 120	
277V Low Voltage (2705T & 2765T only. IC housing only.)	277 LV	
Control System & Dimming Level 0-10V <1% Dimming Lutron T-Series <1% Dimming DALI <1% Dimming (Requires 2 addresses, one for light intensity &	LZ1 LTZ DZ1	
one for color tuning) Low Voltage, PoE Compatible (No driver. Not available with EMR. LV voltage only.)	LVN	
Housing Type IC-Rated / Airtight (700L only. 2750T or 2765T only) Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood (Trimless only. Wood kit required)	IC T TW	
Factory Options		
Bar Hangers Chicago Plenum (2750T & 2765T: 1100L max. 1840T: 700L only.)	BH CP	
Emergency Battery - Remote test switch (Overlap trim only. Not available with CP or IC-rated housing. Above ceiling access required.)	EMR	
TRIM & LED MODULE Aperture 3.5" Square Reflector	LC33	LC33
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options (Tim & housing must match) Tunable White: 1800-4000K Tunable White: 2700-5000K Tunable White: 2700-6500K	1840T 2750T 2765T	
Lumen Output (Trim & housing must match) 700 Lumen 900 Lumen 1100 Lumen 1300 Lumen	700L 900L 1100L 1300L	
Color Temperature Tunable White: 1800-4000K, 90+ CRI Tunable White: 2700-5000K, 90+ CRI Tunable White: 2700-6500K, 90+ CRI	91840T 92750T 92765T	
Optic Tall Cone with 50° cut-off	DNT	

\_C33D

Short Cone with 60° cut-off DNS Super Short Cone with Solite Lens 75° cut-off DSS

Distribution Narrow Flood NFL

Flood 1 FL1

Flood 2 FL2

Wide Flood WFL Very Wide Flood VWFL Super Wide Flood (DSS Optic only) SWFL

Finish

#### (See finishes page for The Naturals options) Clear Diffuse CD Warm Diffuse WD

Black ΒK White WH

**Optional Flange Finish** (Overlap CD & WD finish only) (For matching finishes leave blank) Black Painted BP

6500k

WP White Painted

# ACCESSORIES

Trimless Wood Ceiling Installation Kit I C33-(One kit recommended per 10 downlights)

WOOD-KIT

## 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.

#### Labels

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

## Outdoor Rated (OD) Driver Dimming Performance table

Lumen Output	Minimum Dimming Level
700L	20%
900L	16%
1100L	13%
1300L	10%
1500L	10%
1700L	10%
1900L	10%
2100L	10%

## Lumen Maintenance

 Reported:
 L70 at >55,000 hours
 Calculated:
 L70 at 204,000 hours

 L90 at >55,000 hours
 L90 at 59,000 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, Warm Dimming (2700K-1800K and 3000K-1800K), or Tunable White (1800K-4000K, 2700K-5000K and 2700K-6500K), 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. The Naturals: 100% low VOC vinyl.

## Optics

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

#### **Color Lumen Multipliers**

CRI		STANDARD	WHITE CCT		WARM DIM CCT RANGES		TUNABLE WHITE CCT RANGES		
CRI	2700	3000	3500	4000	2700-1800K	3000-1800K	1800-4000K	2700-5000K	2700-6500K
80+	0.92	0.98	1.00	1.01	-	-	-	-	-
90+	0.79	0.83	0.82	0.84	0.97	0.99	1.00	1.00	1.00
97	0.67	0.72	0.73	0.76	-	-	-	-	-

## **Distribution Lumen Multipliers**

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		Very Wide Flood [VWFL]	0.90
Trimless [SDT]		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		Very Wide Flood [VWFL]	0.86
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	Super Short Cone with Solite Lens	Very Wide Flood [VWFL]	1.07
Trimless [SDT]	with 75° cut-off [DSS]	Super Wide Flood [SWFL]	1.02
Square Die-Cast	Super Short Cone with Solite Lens	Very Wide Flood [VWFL]	1.03
Overlap [SDO]	with 75° cut-off [DSS]	Super Wide Flood [SWFL]	0.98

## **Color Lumen Multipliers**

Trim Type	Optic	Color	Multiplier
ALL		Clear Diffuse [CD]	1.00
	Tall Cone with 50° cut-off [DNT]	Warm Diffuse [WD]	1.01
		White [WH]	1.23
		Black [BK]	0.79
		Clear Diffuse [CD]	1.00
	Short Cone with 60° cut-off [DNS]	Warm Diffuse [WD]	0.89
		White [WH]	0.97
		Black [BK]	0.83
		Clear Diffuse [CD]	1.00
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Warm Diffuse [WD]	0.99
		White [WH]	1.15
		Black [BK]	0.88
ALL		Woven Linen [WLN]	0.93
	ALL	Walnut [WLT]	0.45
		Gray Elm [GRE]	0.72
		Chestnut [CHT]	0.75
		Light Oak [LOK]	0.90

## 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) x (0.81) x (1.02) x (0.97) ≈ 882lm (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 applicationof three multipliers. Refer to IES files for most accurate photometric information.

# Finishes



## STANDARD FINISHES

WHITE WH	BLACK	ΒK	CLEAR DIFFUSE	CD	WARM DIFFUSE	WD

# THE NATURALS (25% SCALE)

