





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.



DISTRIBUTIONS

STANDARD WHITE HOUSING DETAILS



3.5" SQUARE DOWNLIGHT OPTICS

					Distribution Beam Spread Spacing Criteria				
Degree			NFL	FL1	FL2	WFL	VWFL	SWFL	
	∕ 50°	Overlap	25° 0.42	34° 0.56	44° 0.70 45° 0.70	52° 0.85	64° 0.97	-	
DNT	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	-	
DCC	75°	Overlap	-	-	-	-	69° 0.99	92° 1.21	
DSS		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%

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

Lutron Hi-Lume -

STANDARD WHITE HOUSING ORDERING 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	SW	
High 97 CRI Lumen Output	HC	
700 Lumen (Not available with Lutron or LFP) 900 Lumen (Not available with LFP) 1100 Lumen	700L 900L 1100L	
1300 Lumen 1500 Lumen	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	277 LV	
(IC-rated housing: SW - 1700lm max., HC - 1500lm max. T-rated & TW housings: SW - 1100lm max., HC - 900lm max.) Control System & Dimming Level		
0-10V <1% Dimming 0-10V - 1% Dimming	LZ1 L11	
0-10V - 10% Dimming Low Voltage, PoE Compatible	LD1 LVN	
(No driver. Not available with EMR. LV voltage only.) Forward Phase (120V only) Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LFP LH1	
on Hi-Lume - Forward Phase - 1% Dimming (120V only) DALI <1% Dimming	LTE DZ1	
DALI - 1% Dimming Housing Type IC-Rated / Airtight	D11	
(SW - 1700lm max., HC - 1500lm max. Not available with LTE.) Thermally Protected, Non-IC / Airtight	т	
Thermally Protected, Non-IC Wood (Trimless only. Wood kit required)	TW	
Factory Options Bar Hangers Chicago Plenum	BH CP	
Emergency Battery - Remote test switch (Overlap trim only. Not available with CP or IC-rated housing. Above ceiling access required.)	EMR	
(LD1 driver and T-rated housing orly. Not available with CP or EMR. See dimming performance table on page 5.)	OD	
TRIM & LED MODULE		LC33
Aperture 3.5" Square Reflector Trim Type	LC33	
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	1100L 1300L	
1500 Lumen 1700 Lumen 1900 Lumen	1500L 1700L 1900L	
2100 Lumen Color Temperature	2100L	
(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 3500K, 80/90/97+ CRI	_30K	
4000K, 80/90/97+ CRI Optic	_35K	
Tall Cone with 50° out-off	_40K	
Tall Cone with 50° cut-off Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off		
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WRL or SWRL only) Distribution	_40K DNT DNS DSS	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (VWFL or SWFL only)	_40K DNT DNS	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWFL only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood Very Wide Flood	_40K DNT DNS DSS NFL FL1 FL2 WFL VWFL	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWFL only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood	_40K DNT DNS DSS NFL FL1 FL2 WFL	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWFL only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood Very Wide Flood Super Wide Flood (DSS Optic only) Finish Clear Diffuse Black	_40K DNT DNS DSS NFL FL1 FL2 WFL SWFL SWFL SWFL CD WD BK	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWFL only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood Super Wide Flood (DSS optic only) Finish Clear Diffuse Warm Diffuse Black White Optional Flange Finish	_40K DNT DNS DSS NFL FL1 FL2 WFL SWFL SWFL CD WD	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWFL only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood Very Wide Flood Super Wide Flood (DSS optic only) Finish Clear Diffuse Warm Diffuse Black White	_40K DNT DNS DSS NFL FL1 FL2 WFL SWFL SWFL SWFL CD WD BK	
Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (WFL or SWE only) Distribution Narrow Flood Flood 1 Flood 2 Wide Flood Very Wide Flood Super Wide Flood (DSS optic only) Finish Clear Diffuse Black White Optional Flange Finish (Overlap CD & WD finish only. For matching finishes leave blank) Black Painted	_40K DNT DNS DSS NFL FL1 FL2 WFL SWFL SWFL SWFL CD BK WH	

Options in **red** and **orange** qualify for **2-day** and **5-day** Quickship respectively, up to 200 pieces. If **red** and **orange** options make an ordering string, **5-day Quickship** applies. See Quickship Guide for more details. (QS)(**QS**)

project

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	-	
DINT		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	
		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%

		😡 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.



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 LTE Lutron Hi-Lume - Forward Phase (120V only) -1% Dimming DALI <1% Dimming DZ1 DALI - 1% Dimming D11 Housing Type IC-Rated / Airtight IC Thermally Protected, Non-IC / Airtight Т 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.) **TRIM & LED MODULE** Aperture LC33 3.5" Square Reflector LC33 Trim Type Square Die-Cast Overlap SDO Square Die-Cast Trimless SDT **Color Options** WDM Warm Dim WDM Lumen Output 1500L 1500 Lumen 1500L **Color Temperature** Warm Dim: 2700-1800K, 90+ CRI 92718W Warm Dim: 3000-1800K, 90+ CRI 93018W Optic Tall Cone with 50° cut-off DNT 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
per Wide Flood (DSS Optic only)	SWFL
Finish	
Finish Clear Diffuse	CD
	CD WD
Clear Diffuse	
Clear Diffuse Warm Diffuse	WD

Optional Flange Finish

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

Su

White Painted WP

ACCESSORIES

Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights) WOO

WOOD-KIT

TUNABLE WHITE 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 45° 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	-
500	75°	Overlap	-	-	-	-	69° 0.99	92° 1.21
DSS		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	_FLC33D
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Tunable White: 1800-4000K	1840T	
(900L max. T-rated housings only.) Tunable White: 2700-5000K Tunable White: 2700-6500K	2750T 2765T	
Lumen Output 700 Lumen	700L	
900 Lumen 1100 Lumen 1300 Lumen	900L 1100L 1300L	
Voltage 120/277 Volt (2705T & 2765T only. IC housing only.)	UNV	
120V 277V Low Voltage	120 277 LV	
(2705T & 2765T only. IC housing only.) 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.)	IC	
Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood (Trimless only. Wood kit required.)	T TW	
Factory Options Bar Hangers	BH	
Chicago Plenum (2750T & 2765T: 1100L max. 1840T: 700L only.)	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		LC33
3.5" Square Reflector Trim Type	LC33	
Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options (Trim & 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	91840T	
Tunable White: 2700-5000K, 90+ CRI Tunable White: 2700-6500K, 90+ CRI Tunable White: 2700-6500K, 90+ CRI	92750T 92765T	
Tall Cone with 50° cut-off Short Cone with 60° cut-off Super Short Cone with Solite Lens 75° cut-off (VWFL or SWFL only)	DNT DNS DSS	
Distribution Narrow Flood	NFL	
Flood 1 Flood 2 Wide Flood Very Wide Flood Super Wide Flood (DSS Optic only)	FL1 FL2 WFL VWFL SWFL	
Finish Clear Diffuse Warm Diffuse Black	CD WD BK	
White Optional Flange Finish	WH	
		-

6500k

Optional Flange Finish

(Overlap CD & WD finish only) (For matching finishes leave blank Black Painted BP White Painted WP

ACCESSORIES

Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights) UC33-WOOD-KIT d per 10 downlights)

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

Minimum Dimming Level
20%
16%
13%
10%
10%
10%
10%
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.

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		
Chi	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	Tall Cone with 50° cut-off [DNT]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	1.01
		White [WH]	1.23
		Black [BK]	0.79
	Short Cone with 60° cut-off [DNS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.89
		White [WH]	0.97
		Black [BK]	0.83
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.99
		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) 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.