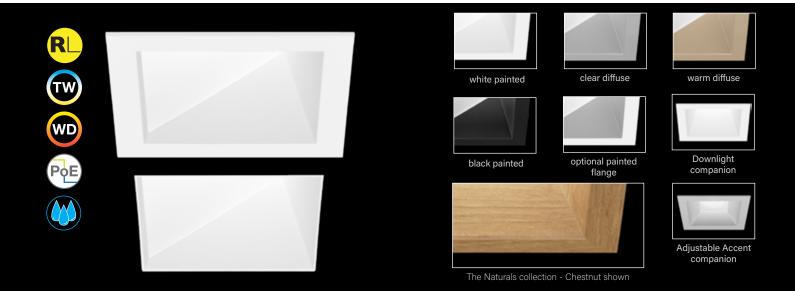
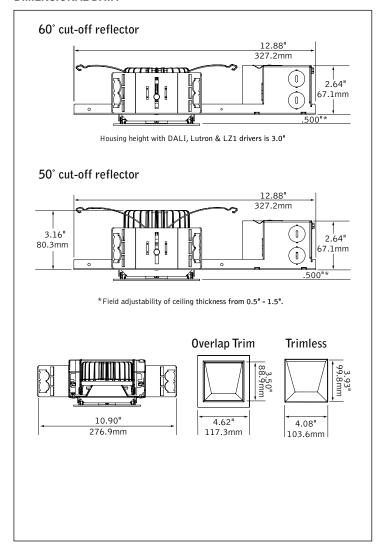
$1D + 3.5" \times 3.5"$

OVERLAP & TRIMLESS LED WALL WASH





DIMENSIONAL DATA



FEATURES

Less than 2.64" low profile housing available.

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

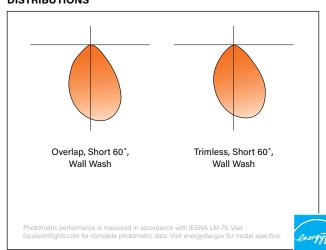
Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

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.

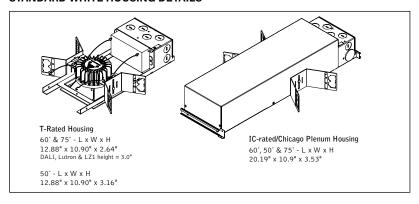
Available with The Naturals, a series of finishes that exude biophilic beauty.

DISTRIBUTIONS



fixture: project:

STANDARD WHITE HOUSING DETAILS



3.5" SQUARE WALL WASH PERFORMANCE TABLES

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

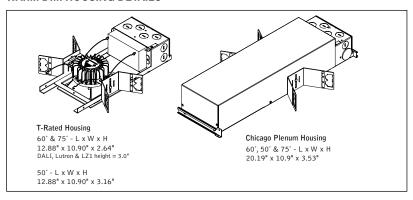
		STANDARD WHITE		
ССТ	Lumen Output	Delivered Lumens	System Watts	LPW
	700L	712	11	64
05001/	900L	913	16	56
3500K, 80CRI	1100L	1104	19	58
000111	1300L	1299	22	58
	1500L	1533	26	59

STANDARD WHITE

STANDARD WHITE		
HOUSING ORDERING Housing Series	El Cooly	FLC33W
ID+ 3.5" Square Trim Type	FLC33W	
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	700L	
900 Lumen 1100 Lumen 1300 Lumen 1500 Lumen	900L 1100L 1300L 1500L	
Voltage 120/277 Volt	UNV	
(IC-rated housing: SW - 1100lm max, HC - 900lm max, T-rated & TW housings: SW - 700lm max, HC not available). 120V 277V	120 277	
Low Voltage (IC-rated housing: SW - 1100lm max., HC - 900lm max. T-rated & TW housings: SW - 700lm max., HC not available.)	LV	
Control System & Dimming Level 0-10V <1% Dimming	LZ1	
0-10V - 1% Dimming 0-10V - 10% Dimming Low Voltage, PoE Compatible (No driver. LV voltage only)	L11 LD1 LVN	
Forward Phase (120V only)	LFP	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming DALI <1% Dimming DALI - 1% Dimming DALI - 1% Dimming	LH1 DZ1 D11	
Housing Type IC-Rated / Airtight	IC	
Thermally Protected, Non-IC Thermally Protected, Non-IC Wood (Trimless only. Wood kit required)	TW	
Factory Options Bar Hangers	ВН	
Chicago Plenum	CP	
Outdoor Rated (LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 5.)	OD	
TRIM & LED MODULE Aperture		
3.5" Square Reflector 3.5" Square AirtightReflector	LC33 LC33AT	
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options (Trim & housing must match)		
Standard White, 80 & 90 CRI High 97 CRI Lumen Output	HC	
(Trim & housing output must match) 700 Lumen	700L	
900 Lumen 1100 Lumen	900L 1100L	
1300 Lumen 1500 Lumen	1300L 1500L	
Color Temperature	1300L	
(Add 9 for 90 CRI or H for 97 CRI. Leave blank for 80 CRI. Examples: 2700K, 97 CRI = H27K. 2700K, 80 CRI = 27K.)	271/	
2700K, 80/90/97+ CRI 3000K, 80/90/97+ CRI	_27K _30K	
3500K, 80/90/97+ CRI 4000K, 80/90/97+ CRI	_35K _40K	
Optic Tall Cone with 50° cut-off	WWT	
Short Cone with 60° cut-off Finish	WWS	
(See finishes page for The Naturals options) Clear Diffuse	CD	
Warm Diffuse Black White	WD BK WH	
Optional Flange Finish (Overlap CD & WD finish only) (For matching finishes leave blank)		
Black Painted White Painted	BP WP	
ACCESSORIES		
Trimless Wood Ceiling Installation Kit	LC33-	
(One kit recommended per 10 downlights)	WOOD-KIT	



WARM DIM HOUSING DETAILS

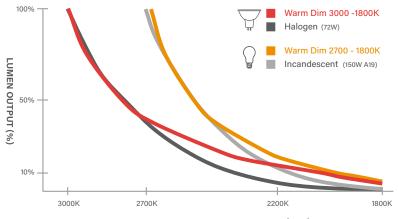


3.5" SQUARE WALL WASH PERFORMANCE TABLE

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

		W WARM DIM		
CCT Range	Lumen Output	Delivered Lumens	System Watts	LPW
2700 - 1800K	1100L	980	25	39
3000 - 1800K	1100L	1001	25	40

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 FLC33W ID+ 3.5" Square FLC33W

WDM

1100L

WDM

1100L

Trim Type

Square Die-Cast Overlap SDO **Square Die-Cast Trimless** SDT

> **Color Options** Warm Dim WDM

Lumen Output 1100 Lumen 1100L

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 DALI <1% Dimming DZ1

DALI - 1% Dimming D11

Housing Type

IC-Rated / Airtight 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 Outdoor Rated OD

(LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 5.)

TRIM & LED MODULE

Aperture

3.5" Square Reflector LC33 3.5" Square AirtightReflector LC33AT

Trim Type

Square Die-Cast Overlap SDO **Square Die-Cast Trimless** SDT

Color Options

Warm Dim WDM **Lumen Output**

1100 Lumen 1100L

Color Temperature

Warm Dim: 2700-1800K, 90+ CRI 92718W Warm Dim: 3000-1800K, 90+ CRI 93018W

Optic

Tall Cone with 50° cut-off WWT Short Cone with 60° cut-off WWS

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

Warm Diffuse WD

Black BK White WH

Optional Flange Finish

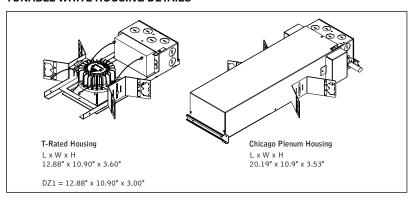
(Overlap CD & WD finish only) (For matching finishes leave blank)

Black Painted BP WP White Painted

ACCESSORIES

LC33-Trimless Wood Ceiling Installation Kit (One kit recommended per 10 downlights) WOOD-KIT fixture: project:

TUNABLE WHITE HOUSING DETAILS



3.5" SQUARE WALL WASH PERFORMANCE TABLES

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

	₩ Т	UNABLE WHITE		
ССТ	Lumen Output	Delivered Lumens	System Watts	LPW
2700K (2700-5000K & -	700L	711	16	43
2700-6500K &	900L	901	21	43
1800K (1800-4000K)	700L	709	24	30

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

DAYLIGHT RANGE





(Default d

Tur Tur Tur

(Overlap CD 8

TUNABLE WHITE

HOUSING ORDERING		51 00011
Housing Series ID+ 3.5" Square	FLC33W	FLC33W
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options Tunable White: 1800-4000K	1840T	
(700L only) Tunable White: 2700-5000K Tunable White: 2700-6500K	2750T 2765T	
Lumen Output 700 Lumen 900 Lumen	700L 900L	
Voltage 120V 277V	120 277	
Control System & Dimming Level 0-10V <1% Dimming DALI <1% Dimming driver offers DT6 control. It requires two addresses, intensity & one for CCT tuning. Consult factory for DT8. Extended lead time apply.)	LZ1 DZ1	
Housing Type Thermally Protected, Non-IC Thermally Protected, Non-IC Wood (Trimless only Wood kit required)	T TW	
Factory Options Bar Hangers Chicago Plenum (2750T & 2765T only.)	BH CP	
TRIM & LED MODULE		
Aperture 3.5" Square Reflector 3.5" Square AirtightReflector	LC33 LC33AT	
Trim Type 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	700L 900L	
Color Temperature nable White: 1800-4000K, 90+ CRI nable White: 2700-5000K, 90+ CRI nable White: 2700-6500K, 90+ CRI	91840T 92750T 92765T	
Optic Tall Cone with 50° cut-off Short Cone with 60° cut-off	WWT WWS	
Finish (See finishes page for The Naturals options) Clear Diffuse Warm Diffuse Black White	CD WD BK WH	
Optional Flange Finish & WD finish only) (For matching finishes leave blank) Black Painted White Painted	BP WP	

ACCESSORIES
Trimless Wood Ceiling Installation Kit
(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. LC33AT 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.

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%

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.

Warrant

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 or 60-degree cut-off to light source and its image. Wall wash features acrylic diffuser to provide smooth illumination down the wall.

Color Lumen Multipliers

CRI		STANDARD	WHITE CCT		WARM DIM O	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	0.89	0.91	1.00	1.00	1.00					
97	0.67	0.72	0.73	0.76	-	-	-	-	-					

Distribution Lumen Multipliers

Trim Type	Optic	Distribution	Multiplier
Square Die-Cast	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.09
Trimless [SDT]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.32
Square Die-Cast	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.02
Overlap [SDO]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.22

Color Lumen Multipliers

Trim Type	Optic	Color	Multiplier
		Clear Diffuse [CD]	1.00
	Tall Cone with 50° cut-off [WWT]	Warm Diffuse [WD]	0.94
	Tall Cone with 50 cut-on [www1]	White [WH]	1.45
ALL		Black [BK]	0.59
ALL		Clear Diffuse [CD]	1.00
	Short Cone with 60° cut-off [WWS]	Warm Diffuse [WD]	0.92
	Short Cone with 60 cut-on [wws]	White [WH]	1.32
		Black [BK]	0.68
		Woven Linen [WLN]	0.93
		Walnut [WLT]	0.45
ALL	ALL	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:

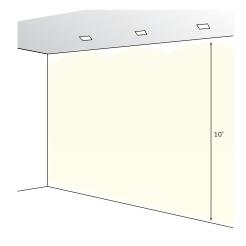
LC33-SDO-SW-1100L-935K-WWS-WH (1100) x (0.81) x (1.32) \approx 1552lm (estimated delivered lumens)

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.

1D+ 3.5" x 3.5"

WALL WASH DESIGN GUIDE - 1500 LUMEN, SHORT CONE (WWS) EXAMPLE

Calc	culation											Fo	otca	andl	es													
	Distance			Fixt	ıres	3' fr	om	Wal	I			Fixtures 3.5' from Wall								Fixtures 4' from Wall								
from	Ceiling	3	3' 00	0	3.5' OC			4	1' 0	2	3	3' OC			5' O	С	4	1' 00		3	3' O		3.	5' C	С	_	1' O(2
	3"	6	6	6	7	6	7	7	6	7	5	5	5	5	5	5	6	5	6	4	4	4	4	4	4	5	5	5
0	6"	9	9	9	10	9	9	10	9	10	7	7	7	8	7	7	8	7	7	6	6	6	6	6	6	6	6	6
<u> -</u>	9"	13	14	13	14	13	13	14	13	14	10	11	10	10	10	10	10	10	10	8	9	8	8	8	8	8	9	8
	12"	17	18	17	17	17	17	17	16	17	13	14	12	13	13	13	12	13	12	10	11	10	10	10	10	10	10	10
	2'	18	20	19	19	19	19	19	18	19	14	15	14	14	14	14	14	14	14	11	12	11	11	12	11	11	11	11
	3'	25	28	25	24	26	24	23	24	23	19	21	19	18	20	18	17	18	17	15	17	15	14	15	14	14	15	14
	4'	28	32	28	26	29	26	24	26	24	23	27	23	21	24	21	20	22	20	18	21	18	17	20	17	16	18	16
	5'	25	29	25	23	27	23	22	24	22	23	26	23	21	25	21	20	23	20	20	23	20	19	22	19	17	20	17
	6'	20	23	20	19	22	19	18	20	18	20	23	20	19	22	19	18	20	18	19	22	19	18	20	18	17	19	17
	7'	17	19	17	16	18	16	15	17	15	17	19	17	16	18	16	15	17	15	17	19	17	16	18	16	15	17	15
	8'	14	15	14	13	15	13	12	14	12	15	16	15	14	15	14	13	15	13	15	16	15	14	16	14	13	15	13
	9'	12	13	12	11	12	11	11	12	11	12	14	12	12	13	12	11	13	11	13	14	13	12	13	12	11	13	11
	10'	8	8	8	7	8	7	7	8	7	8	9	8	8	9	8	7	8	7	9	9	9	8	9	8	8	9	8



IES File: FLC33W-SDO-SW-1500L-SDO-SW-1500L-35K-WWS-CD. Parameters: 80/50/20 reflectances, LLF=.09.

WALL WASH DESIGN GUIDE - 1500 LUMEN, TALL CONE (WWT) EXAMPLE

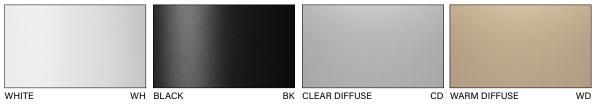
Calc	culation											Fc	otca	andl	es																
Point	Distance			Fixt	ixtures 3' from Wall								Fixtures 3.5' from Wall									Fixtures 4' from Wall									
from	Ceiling	3' OC 3.5' OC				4	1 00	0	3	3' OC			3.5' OC			4' OC			3' 0	С	3.	5' C	С	4' OC							
	3"	4	4	4	4	4	4	5	4	5	3	3	3	4	3	4	4	4	4	3	3	3	3	3	3	3	3	3			
0	6"	6	6	6	6	6	6	7	6	7	4	4	4	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4			
<u>-</u>	9"	9	10	9	10	9	10	10	9	10	7	7	7	7	7	7	7	7	7	5	6	5	6	6	5	6	6	6			
	12"	12	13	12	12	12	12	13	12	12	9	10	9	9	9	9	9	9	9	7	8	7	7	7	7	7	8	7			
	2'	14	15	14	14	14	14	14	14	14	10	11	10	11	11	11	11	11	11	8	9	8	8	9	8	8	9	8			
	3'	17	18	17	16	17	16	16	16	16	13	15	13	13	14	13	13	13	13	11	12	11	10	11	10	10	11	10			
	4'	19	22	19	18	19	18	17	18	17	15	17	15	14	16	14	13	15	13	12	14	12	12	13	12	11	12	11			
	5'	19	23	19	18	20	18	17	18	17	16	19	16	15	17	15	14	16	14	13	16	13	13	14	13	12	13	12			
	6'	17	20	17	16	19	16	15	17	15	16	19	16	15	17	15	14	16	14	14	16	14	13	15	13	12	14	12			
	7'	15	17	15	14	16	14	13	15	13	14	17	15	14	16	14	13	15	13	14	16	14	13	15	13	12	14	12			
	8'	13	14	13	12	14	12	11	13	11	13	14	13	12	14	12	11	13	11	13	14	13	12	14	12	11	13	11			
	9'	11	12	11	10	12	10	10	11	10	11	13	11	11	12	11	10	12	10	11	13	11	11	12	11	10	12	10			
	10'	7	8	7	7	8	7	6	7	6	8	8	8	7	8	7	7	8	7	8	9	8	7	8	7	7	8	7			

IES File: FLC33W-SDO-SW-1500L-SDO-SW-1500L-35K-WWT-CD. Parameters: 80/50/20 reflectances, LLF=.09.

Finishes



STANDARD FINISHES



THE NATURALS (25% SCALE)

