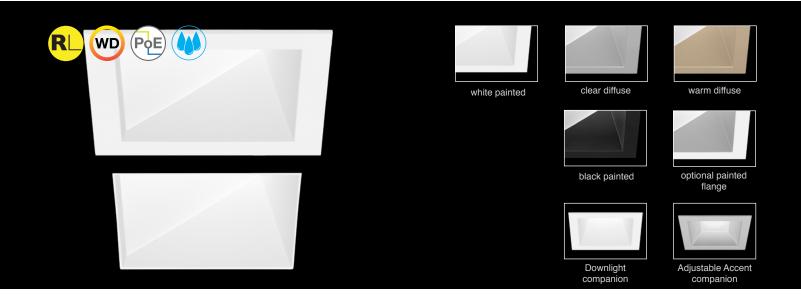
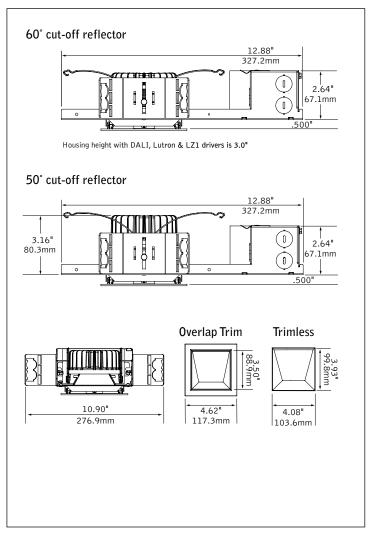
ID+ 3.5" x 3.5" overlap & trimless led wall wash





DIMENSIONAL DATA



FEATURES

Less than 2.64" low profile housing available.

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

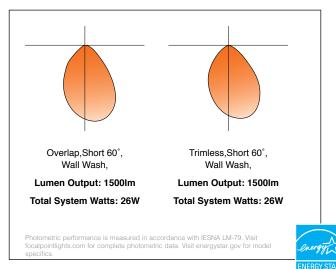
 50° cut-off and 60° cut-off reflector options available.

Outdoor rating permits use in outdoor covered ceiling applications.

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

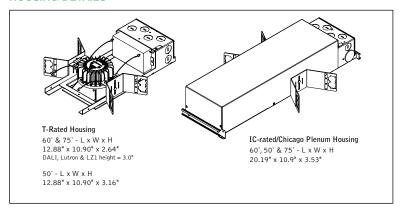
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

PERFORMANCE



fixture: project:

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. 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.

Lumen Maintenance

Reported: L70 at >55,000 hours Calculated: L70 at 204,000 hours
L90 at >55,000 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, 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 or 60-degree cut-off to light source and its image. Wall wash features acrylic diffuser to provide smooth illumination down the wall.

PERFORMANCE TABLE - see page 3.

HOUSING ORDERING		
Housing Series ID+ 3.5" Square	FLC33W	FLC33W
Trim Type Square Die-Cast Overlap Square Die-Cast Trimless	SDO SDT	
Color Options		
Standard White, 80 & 90 CRI High 97 CRI Warm Dim	SW HC WDM	
(1100L only. UNV & LV not available.) Lumen Output		
700 Lumen 900 Lumen	700L 900L	
1100 Lumen 1300 Lumen	1100L 1300L	
1500 Lumen	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 (T-rated housing only)	120 277	
Low Voltage (IC-rated housing: SW - 1100lm max., HC - 900lm max.	LV	
T-rated & TW housings: SW - 700lm max., HC not available.) Control System & Dimming Level		
0-10V - 0% Dimming	LZ1	
0-10V - 1% Dimming 0-10V - 10% Dimming	L11 LD1	
Low Voltage, PoE Compatible (No driver. LV voltage only.)	LVN	
Forward Phase (120V only) Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LFP LH1	
Lutron 5-Series EcoSystem (LDE5) - 5% Dimming	LU5	
Lutron Hi-Lume - Forward Phase (120V only) - 1% Dimming	LTE	
DALI - 0% Dimming DALI - 1% Dimming	DZ1 D11	
Housing Type		
IC-Rated / Airtight (LTE 900lm max.)	IC	
Thermally Protected, Non-IC / Airtight Thermally Protected, Non-IC Wood (wood kit required)	TW	
Factory Options	BH	
Bar Hangers Chicago Plenum	CP	
Outdoor Rated (LD1 driver and T-rated housing only. Not available with CP. See dimming performance table on page 3.)	OD	
TRIM & LED MODULE		
Aperture	1.000	
3.5" Square Reflector 3.5" Square AirtightReflector Trim Type	LC33 LC33AT	
Square Die-Cast Overlap Square Die-Cast Trimless Color Options	SDO SDT	
(Trim & housing must match) Standard White, 80 & 90 CRI	CW	
High 97 CRI	SW HC	
Warm Dim (1100L only) Lumen Output	WDM	
(Trim & housing output must match) 700 Lumen	700L	
900 Lumen 1100 Lumen	900L 1100L	
1300 Lumen 1500 Lumen	1300L 1500L	
Color Temperature	1500L	
(Add 9 for 90 CRI or H for 97 CRI. Leave blank for 80 CRI. Examples: 2700K, 97 CRI = H27K. 2700K, 80 CRI = 27K.)	0714	
2700K, 80/90/97+ CRI 3000K, 80/90/97+ CRI	_27K _30K	
3500K, 80/90/97+ CRI 4000K, 80/90/97+ CRI	_35K 40K	
Warm Dim: 2700-1800K, 90+ CRI Warm Dim: 3000-1800K, 90+ CRI	92718W 93018W	
Optic	9301000	
Tall Cone with 50° cut-off Short Cone with 60° cut-off	WWT WWS	
Finish		
Clear Diffuse Warm Diffuse	WD	
Black White	BK WH	
Optional Flange Finish (Overlap CD & WD finish only) (For matching finishes leave blank)		
Black Painted White Painted	BP WP	
ACCESSORIES	VVI	
Wood Ceiling Installation Kit	LC33-	
(One kit recommended per 10 downlights)	WOOD-KIT	



SQUARE WALL WASH PERFORMANCE TABLE

Lumen Output	Delivered Lumens	System Watts	LPW
700L	712	11	64
900L	913	16	56
1100L	1104	19	58
w 1100L	1001	25	40
1300L	1299	22	58

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

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE TABLE

Lumen Output	Minimum Dimming Level
700L	15%
900L	11%
1100L	10%
1300L	10%
1500L	10%

Color Temperature & CRI

Trim Type	Optic	Color Tempera	ture	Multiplier
			80+ CRI [27K]	0.93
		2700K	90+ CRI [927K]	0.75
			97 CRI [H27K]	0.67
			80+ CRI [30K]	0.93
		3000K	90+ CRI [930K]	0.81
			97 CRI [H30K]	0.72
ALL	ALL		80+ CRI [35K]	1.00
ALL	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]	0.91
		3000-1800K	90+ CRI [93018K]	0.90

Distribution

Trim Type	Optic	Distribution	Multiplier
Causes Die Coet Trimlese [CDT]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.09
Square Die-Cast Trimless [SDT]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.32
Causara Dia Caat Ouarlan [CDO]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.02
Square Die-Cast Overlap [SDO]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.22

Color

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

Multiplier tables are provided to aid with estimation of lumen levels across options. Apply multipliers against ordered Lumen Output to estimate Delivered Lumens. Refer to IES files for most accurate photometric information.

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

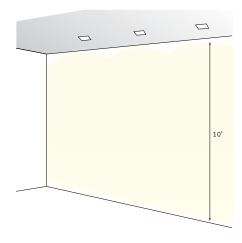
 $(1100) \times (0.81) \times (1.32) \times (1.32) \approx 1552 \text{Im}$ (estimated delivered lumens)

ID+ 3.5" x 3.5"

LED WALL WASH

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

Calc	culation											Fo	otca	andl	es													
Point	Distance		ı	=ixtu	ıres	3' fr	rom	Wal	I		Fixtures 3.5' from Wall									Fixtures 4' from Wall								
from	Ceiling	3' OC			3.5' OC			4' OC			3' OC			3.5' OC			4' OC			3	s' O(0	3.	5' O	С	4	l' 00	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											Fo	otc	andl	es													
	Distance		ı	Fixtu	ıres	3' fı	rom	Wal	ı		Fixtures 3.5' from Wall									Fixtures 4' from Wall								
from	Ceiling	3	s' O(2	3.5' OC			4' OC			3	3' OC			3.5' OC			4' OC			s' O(0	3.	5' C	С	4	1' O(<u> </u>
	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

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