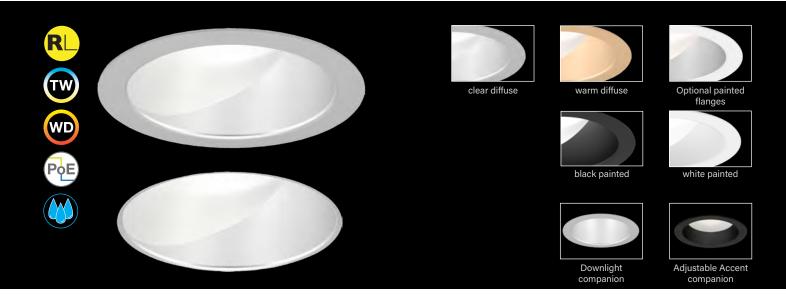
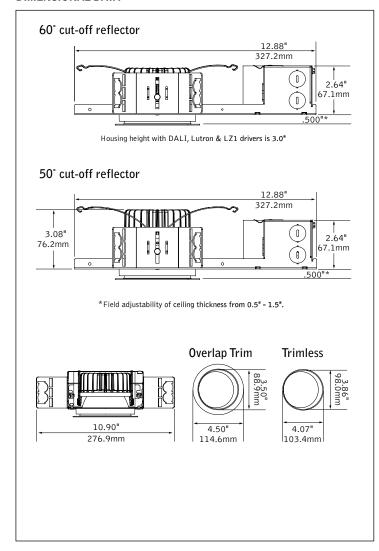
# ID+ 3.5" OVERLAP & TRIMLESS LED WALL WASH





# **DIMENSIONAL DATA**



# **FEATURES**

Less than 2.64" low profile housing available.

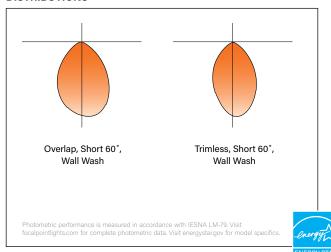
50° cut-off and 60° cut-off reflector options available.

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.

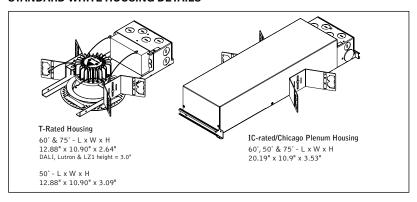
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

# **DISTRIBUTIONS**



fixture: projec

#### STANDARD WHITE HOUSING DETAILS



## 3.5" ROUND WALL WASH PERFORMANCE TABLES

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

	STANDARD WHITE		
Lumen Output	<b>Delivered Lumens</b>	System Watts	LPW
700L	726	8	87
900L	907	10	89
1100L	1102	14	77
1300L	1311	17	79
1500L	1516	19	81
1700L	1712	21	81
1900L	1903	23	82
2100L	2130	26	82
	700L 900L 1100L 1300L 1500L 1700L	Lumen Output         Delivered Lumens           700L         726           900L         907           1100L         1102           1300L         1311           1500L         1516           1700L         1712           1900L         1903	Lumen Output         Delivered Lumens         System Watts           700L         726         8           900L         907         10           1100L         1102         14           1300L         1311         17           1500L         1516         19           1700L         1712         21           1900L         1903         23

# STANDARD WHITE HOUSING ORDERING FLC3W **Housing Series** Round FLC3W Trim Type Round Overlap Round Trimless **Color Options** Standard White, 80 & 90 Cm High 97 CRI HC **Lumen Output** 900 Lumen 900L 1100 Lumen 1300 Lumen 1300L 1500 Lumen 1500L 1700 Lumen 1900 Lumen 2100 Lumen 2100L Voltage (IC-rated housing: SW - 1700lm max, HC - 1500lm max, T-rated & TW housings: SW - 1100lm max, HC - 900lm max) Low Voltage (IC-rated housing: SW - 1700lm max., HC - 1500lm max.) T-rated & TW housings: SW - 1100lm max., HC - 900lm max.) LV **Control System & Dimming Level** 0-10V <1% Dimming LZ1 0-10V - 1% Dimming Low Voltage, PoE Compatible (No driver. LV voltage only.) Forward Phase (120V only) LFP Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming LH1 DALI <1% Dimming DZ1 DALI - 1% Dimming D11 **Housing Type** Thermally Protected, Non-IC Wood (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" Round Reflector LC3 3.5" Round Airtight Reflector LC3AT Trim Type Round Overlap Round Trimless **Color Options** (Trim & housing must match) Standard White, 80 & 90 CRI High 97 CRI HC **Lumen Output** (Trim & housing output must match) 700 Lumen 900 Lumen 1100 Lumen 1100 Lumen 1100 Lumen 1300 Lumen 1500 Lumen 1700 Lumen 1700L 1900 Lumen 1900L 2100 Lumen 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 3500K, 80/90/97+ CRI 4000K, 80/90/97+ CRI \_40K Optic Tall Cone with 50° cut-off WWT Short Cone with 60° cut-off WWS Finish Clear [ Warm Diffuse WD Black BK **Optional Flange Finish** (Overlap CD & WD finish only) (For matching finishes leave blank) Black Painted BP

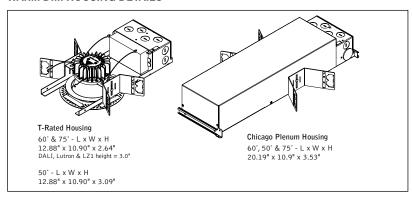
**ACCESSORIES** 

(One kit recommended per 10 downlights) WOOD-KIT

Trimless Wood Ceiling Installation Kit LC3-

fixture: proiec

#### WARM DIM HOUSING DETAILS

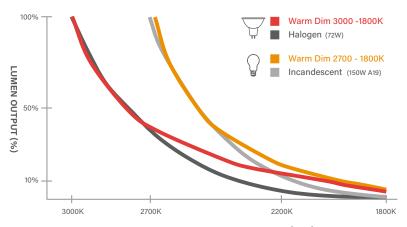


## 3.5" ROUND WALL WASH PERFORMANCE TABLE

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	1500L	1367	25	55
3000 - 1800K	1500L	1395	25	56

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** FLC3W ID+ 3.5" Round FLC3W **Trim Type** Round Overlap RO Round Trimless **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 0-10V - 10% Dimming LD1 Forward Phase (120V only) LFP Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming LH1 DALI <1% Dimming DALI - 1% Dimming D11 **Housing Type** IC-Rated / Airtight IC Thermally Protected, Non-IC 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 See dimming performance . Not available with CP. nance table on page 5.) **TRIM & LED MODULE Aperture** 3.5" Round Reflector LC3 3.5" Round Airtight Reflector LC3AT Trim Type Round Overlap RO Round Trimless **Color Options** WDM Warm Dim) WDM **Lumen Output** WDM 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 WWT Short Cone with 60° cut-off WWS Clear Diffuse CD Warm Diffuse WD Black BK White WH **Optional Flange Finish** (Overlap CD & WD finish only) (For matching finish Black Painted BP

White Painted

**ACCESSORIES** 

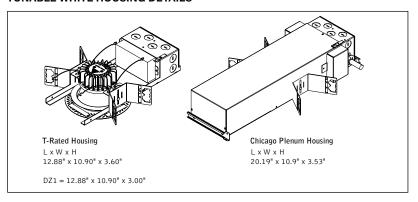
Trimless Wood Ceiling Installation Kit

WP

WOOD-KIT

fixture: project

#### **TUNABLE WHITE HOUSING DETAILS**



## 3.5" ROUND WALL WASH PERFORMANCE TABLES

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

	<b>™</b> 1	TUNABLE WHITE		
ССТ	Lumen Output	Delivered Lumens	System Watts	LPW
2700K	700L	710	15	47
(2700-5000K & 2700-6500K)	900L	899	19	47
2700-6500K)	1100L	1116	24	46
1800K (1800-4000K)	700L	711	22	32

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

# DAYLIGHT RANGE





# **TUNABLE WHITE**

**HOUSING ORDERING Housing Series** FLC3W ID+ 3.5" Round FLC3W **Trim Type** Round Overlap RO Round Trimless RT **Color Options** Tunable White: 1800-4000K 1840T Tunable White: 2700-5000K 2750T Tunable White: 2700-6500K 2765T **Lumen Output** 700 Lumen 700L 900 Lumen 900L 1100 Lumen 1100L Voltage 120V 120 277V 277 **Control System & Dimming Level** 0-10V <1% Dimming LZ1 DALI <1% Dimming DZ1 (Default driver offers DT6 control. It requires two addresses, one for intensity & one for CCT tuning. Consult factory for DT8.

Extended lead time apply.) **Housing Type** Thermally Protected, Non-IC Thermally Protected, Non-IC Wood TW (Trimless only. Wood kit required) **Factory Options** Bar Hangers BH Chicago Plenum CP (900L max. 2750T & 2765T only.) **TRIM & LED MODULE** 3.5" Round Reflector LC3 3.5" Round Airtight Reflector LC3AT **Trim Type** Round Overlap RO Round Trimless RT **Color Options** Tunable White: 1800-4000K Tunable White: 2700-5000K 2750T Tunable White: 2700-6500K 2765T **Lumen Output** 700 Lumen 700L 900 Lumen 900L 1100 Lumen 1100L **Color Temperature** Tunable White: 1800-4000K, 90+ CRI 91840T Tunable White: 2700-5000K, 90+ CRI 92750T Tunable White: 2700-6500K, 90+ CRI Optic Tall Cone with 50° cut-off WWT Short Cone with 60° cut-off WWS Finish 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 White Painted WP

**ACCESSORIES** 

nmended per 10 downlights) WOOD-KIT

Trimless Wood Ceiling Installation Kit LC3-

#### 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 ceiling 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.

# 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

 $\label{thm:period} \textit{Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.}$ 

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

#### Aesthetics

Parabolic reflector cone ensures glare free optics. DNT & DNS reflector is .050 spun aluminum. DSS reflector is die-cast aluminum.Trims are self-flanged. Non-painted trim matches reflector finish. Painted flange may also be specified.

## 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**

<b>CRI</b> 80+ 90+		STANDARD	WHITE CCT		WARM DIM O	CCT RANGES	TUNABLE WHITE CCT RANGES							
	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	0.91	0.93	1.00	1.00	1.00					
97	0.67	0.72	0.73	0.76	-	-	-	-	-					

# **Distribution Lumen Multipliers**

Trim Type	Optic	Distribution	Multiplier
David Trialess [DT]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.03
Round Trimless [RT]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.10
Round Overlap [RO]	Tall Cone with 50° cut-off [WWT]	Wall Wash	1.01
Round Overlap [RO]	Short Cone with 60° cut-off [WWS]	Wall Wash	1.10

# **Color Lumen Multipliers**

Trim Type	Optic	Color	Multiplier
		Clear Diffuse [CD]	1.00
	Tall Cone with 50° cut-off [WWT]	Warm Diffuse [WD]	0.91
	Tall Corie with 50 cut-on [www1]	White [WH]	1.08
ALL		Black [BK]	0.46
ALL		Clear Diffuse [CD]	1.00
	Short Cone with 60° cut-off [WWS]	Warm Diffuse [WD]	0.93
	Short cone with 60 cut-on [wwws]	White [WH]	1.11
		Black [BK]	0.56

# How To Use Lumen Multipliers

# Formula:

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

# Example:

LC3-RO-SW-1100L-935K-WWS-WH (1100) x (0.81) x (1.10) x (1.11) ≈ 1088lm (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.



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

Calo	culation							Footcandles																				
Point	Distance			Fixt	ures	3' fr	om	Wal	ı			F	ixtu	res (	3.5' 1	from	ı Wa	ıll		Fixtures 4' from Wall								
from	n Ceiling	3	3' 00	0	3.5' OC			4' OC			3	3' OC			3.5' OC			4' OC			3' 00	2	3.	5' C	С	4' OC		
	3"	5	4	4	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	4	4
0	6"	7	7	7	8	7	7	8	7	8	5	6	5	6	6	6	6	6	6	4	5	4	5	5	5	5	5	5
<u>-</u> -	9"	11	11	11	11	11	11	11	11	11	8	9	8	8	8	8	8	8	8	6	7	6	7	7	6	7	7	7
	12"	13	14	13	13	14	13	13	13	13	10	11	10	10	11	10	10	10	10	8	9	8	8	9	8	8	9	8
	2'	15	16	15	15	15	15	15	15	15	12	13	12	11	12	11	11	12	11	9	10	9	9	10	9	9	10	9
	3'	17	19	18	17	18	17	17	17	17	14	15	14	14	14	14	13	14	13	11	13	11	11	12	11	11	12	11
	4'	19	22	19	19	20	19	18	19	18	16	17	16	15	16	15	14	15	14	13	14	13	12	13	12	11	13	11
	5'	18	21	18	17	20	17	16	18	16	16	19	16	15	17	15	14	16	14	14	16	14	13	15	13	12	14	12
	6'	16	19	16	15	17	15	14	16	14	15	17	15	14	16	14	13	15	13	14	16	14	13	15	13	12	14	12
	7'	14	16	14	13	15	13	12	14	12	14	15	14	13	15	13	12	14	12	13	15	13	12	14	12	11	13	11
	8'	12	13	12	11	13	11	11	12	11	12	13	12	11	13	11	11	12	11	12	13	12	11	12	11	10	12	10
	9'	10	11	10	10	11	10	9	10	9	11	12	11	10	11	10	9	11	9	10	11	10	10	11	10	9	11	9
	10'	7	7	7	6	7	6	6	7	6	7	8	7	7	7	7	6	7	6	7	8	7	7	8	7	6	7	6



IES File: FLC3W-RO-SW-1500L-RO-SW-1500L-35K-WWS-CD. Parameters: 80/50/20 reflectances, LLF=.09

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

Calc	culation		Footcandles																									
	Distance			Fixtı	ıres	3' fr	om	Wal	ı			Fixtures 3.5' from Wall								Fixtures 4' from Wall								
from	Ceiling	3	3' 00		3.5' OC			4' OC			3	3' OC			3.5' OC			4' OC			3' 00		3.	5' C	C	4' OC		
	3"	6	6	6	7	6	7	7	6	7	5	5	5	5	5	5	5	5	6	4	4	4	4	4	4	5	5	5
0	6"	9	9	9	9	9	9	10	9	10	7	7	7	7	7	7	8	7	7	6	6	6	6	6	6	6	7	6
<u> -</u>	9"	13	14	13	13	13	13	13	13	13	10	11	10	10	10	10	10	10	10	8	9	8	8	9	8	8	9	8
	12"	16	17	16	16	16	16	16	16	16	12	13	12	12	13	12	12	13	12	10	11	10	10	10	10	10	11	10
	2'	17	19	17	18	18	18	18	17	18	14	15	14	14	14	14	13	14	13	11	12	11	11	12	11	11	12	11
	3'	21	23	21	20	21	20	20	20	20	17	18	17	16	17	16	16	17	16	13	15	14	13	14	13	13	14	13
	4'	22	24	22	21	23	21	20	21	20	18	20	18	17	19	17	16	18	16	15	17	15	14	16	14	14	15	14
	5'	22	25	22	20	23	21	19	21	19	18	21	18	17	19	17	16	18	16	16	17	16	15	16	15	14	16	14
	6'	20	23	20	19	21	19	18	20	18	18	20	18	17	19	17	16	18	16	16	18	16	15	17	15	14	16	14
	7'	18	20	18	16	19	16	15	17	15	17	19	17	16	18	16	15	17	15	15	17	15	14	16	14	14	15	14
	8'	15	17	15	14	16	14	13	15	13	15	17	15	14	16	14	13	15	13	14	16	14	14	15	14	13	15	13
	9'	13	15	13	13	14	13	12	13	12	13	15	13	13	14	13	12	14	12	13	14	13	12	14	12	12	13	12
	10'	9	9	9	8	9	8	8	9	8	9	10	9	9	10	9	8	9	8	9	10	9	9	10	9	8	9	8

IES File: FLC3W-RO-SW-1500L-RO-SW-1500L-35K-WWT-CD. Parameters: 80/50/20 reflectances, LLF=.09.