# **Downlighting**

# LIGHTOLIER

# Calculite LED 4" gen 3





C4SLW Square Lensed Wall Wash

Calculite LED 4" generation 3 provides excellent performance coupled with optimized installation flexibility. Industry leading visual comfort and uniform illumination make it an ideal choice for open office, institution, healthcare, and retail applications.

Buy American Act of 1933 (BAA) Compliant luminaire\*: Complete luminaire = Frame-BAC + Engine-BAC + Trim-BAC

\* BAA compliance requires that BAC option be selected for each of frame, engine, and trim. Frame, engine, and trim will be shipped together as a single product. Accessories (optional) are not currently BAA-compliant.

Frame: Ordered & shipped separately.

Project:		
Location:		
Cat.No:		
Туре:		
Qty:		
Notos		

#### Follow the ordering guidelines below. Each step is a separate order line.

	Frame 4S						Example: 4SN	
Step 2	Engine &	Trim: Ordered	d & shipp	ed as a single p	roduct.			
	Engine C4L				-C4S		Example: C4L159	935MZ10U-C4SLWCCP
Step 3 (optiona	Accessor	ries: Ordered	& shippe	d separately.				
Frame	I		T			standa	ard example: 4SN	BAC example: 4SN-BAC
Series 4S	Installation		Voltage	e/Options				
4S 4" Non-IC Square	N New const		EM6	Universal 120/27 Emergency, 6W 9 Universal 120/27	Self-Test/Self-Diagnostic <sup>1</sup> BAC	· ·		nerican Act of 1933 (BAA) <sup>9</sup>
Engine				<u> </u>	Standard example: C4L2	· · · · · · · · · · · · · · · · · · ·		C4L20930MZ10D20U-BAC
Series	Lumens	CRI/CCT		Beam	Dimming	Options	Voltage	Options
C4L Calculite LED 4" gen 3	05 500 lm 10 1000 lm 15 1500 lm 20 2000 lm 25 2500 lm 30 3000 lm*	950 90CRI/ D2W 90CRI/ to 1800	/3000K /3500K /4000K /5000K <sup>3</sup> /3000K		Z10 0-10V 1%  L01 Lutron PEQO EcoSystem 0.1% L1 Lutron LDE1 EcoSystem (500ir RA Integral Interact RF sensor <sup>5</sup> D DALI 0.1%	n not available)	U 120/277V 3 347V (210 only) U 120/277V nected lighting control) U 120/277V	F Flex install <sup>6</sup> (no frame required)  RH Retrofit for tall collar frame <sup>7</sup> BAC Meets the requirements of the Buy American
	* See marked spacings requirements on page 9.	(dim-to-	-warm)		SOL EldoLED Solo 0-10V 0.1% DMX Digital Multiplexing w/RDM 0.1%  E Forward & Reverse Phase (up	LIN Linear  None LIN Linear SQR Square  to 2500lm)	U 120/277V	Act of 1933 (BAA) <sup>9</sup>

**Trim** 

Step 1

standard example: C4SLWCCP | BAC example: C4SLWCCP-BAC

Series C4	Aperture	Style LW	Finish	Flange	Options
C4 Calculite LED 4" gen 3	S Square	LW Lensed Wall Wash <sup>8</sup>	CL Specular clear CC Comfort clear CD Comfort clear diffuse BK Black (matte)	White (matte)     P Polished (matches aperture)     F Flangeless (requires CA4SFT)	BAC Meets the requisites of the Buy American Act of 1933 (BAA) <sup>9</sup>
			WH White (matte)	- White (matches finish) F Flangeless (requires CA4SFT)	

See footnotes on page 2.













# Square Lensed Wall Wash

#### Accessories (Not currently BAA-compliant) learn more below

SWCS Interact Ready System Bridge Accessory (refer to SWCS spec sheet for options and details)

4" round/square non-IC frame with Flex (F) light engine

4RNSR (provides mechanical support for rough-in construction only, no junction box)

LCEM6 Field installable Bodine BSL06 emergency battery pack

(for Flex (F) light engine only, includes switch mounting plate)

T347-75VA 347:120V step-down transformer for non-IC (N) frame only (see page 3)

Mud-in ring for use in 4" square flangeless trim installations CA4SFT

(ordered with a flangeless trim)

Field-installable Bodine BSL6 6W battery pack with self-test/self-CAEM6 diagnostic (for new construction frames, 120-277V) (see page 3 for details)

CAEM6TSCP

Emergency test switch mounting plate.
Must be ordered with EM6 frame for remote test switch (see page 3)

#### Square Wall Wash

Photometric - Downlights with CRI of 90+ & R9 of 50+

Lumen		Flux	Efficacy	Beam				IES	TM-30	)-18	
Package	Beam	(lm)	(lm/W)	Angle	СВСР	CRI	R9	R <sub>f</sub>	$R_g$	R <sub>cs,h1</sub>	UGR
500 lm	Lensed (LW)	493	81	_	_	90+	50+	91	99	-6%	16
1000 lm	Lensed (LW)	832	83	_	-	90+	50+	91	99	-6%	18
1500 lm	Lensed (LW)	1197	85	_	-	90+	50+	91	99	-6%	19
2000 lm	Lensed (LW)	1538	84	_	_	90+	50+	91	99	-6%	20
2500 lm	Lensed (LW)	1931	96	_	_	90+	50+	91	99	-6%	21
3000 lm	Lensed (LW)	2336	69	_	-	90+	50+	91	99	-6%	21



# AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering and high efficacy



Standard CRI 90

Better color rendering and low efficacy



AccuRender

Best color rendering, color preference and high efficacy

# **Enjoy design flexibility**

#### Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple color temperatures (CCTs) and lumen packages offered

### **Promote savings**

#### High efficacy, with no penalty:

- · Energy efficacy compares well to conventional 80 CRI
- · Up to 25% more energy savings vs competitor 90 CRI1
- · Helps meet Title 24 requirements

### Show your true colors

#### High color rendering:

- · True to life colors that help energize your environment and render better flesh tones critical for healthcare hospitality and retail applications.
- R<sub>a</sub> up to 94 CRI · R<sub>f</sub> up to 92 TM-30 R<sub>9</sub> up to 67 CRI  $R_{f,h1}$  up to 91 TM-30  $R_9$  up to 100 TM-30 G<sub>a</sub> up to 99 CRI C<sub>9</sub> up to 94 CRI  $R_{cs,h1}$  up to -5% TM-30

# Achieve color balance

#### Best in class color consistency:

Promote aesthetic harmony in your space with ≤ 2 SDCM

# Footnotes for page 1

- Emergency (EM6) frame requires remote mounted test switch. Order CAEM6TSCP mounting plate accessory (not compatible with 347V configurations)
- 2. Chicago plenum (LC) frame option not available with BAC nor EM6 options.
- 3. Consult factory for 5000K CCT (50) with narrow (N) beam
- 4. Dim-to-warm (D2W) available only with Z10 dimming to 2000lm. Narrow (N) and medium (M) beam engines only.
- 5. Linear driver profile (see page 8).
- 6. Flex install option requires light engine (F)/trim only (up to 2500lm). For use only with optional 4RNSR new construction frame accessory available. Not available with Interact (RA) dimming and IEM6 trim options. See page 3 for further details.
- 7. Retrofits select legacy luminaires (E & Z10 dimming only see pages 3 & 8).
- Medium (M) beam is ideal for Lensed Wall Wash (LW) applications.
- Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

# Square Lensed Wall Wash

#### Frame-in-kits

#### **New Construction:**

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

Max ceiling thickness is 2" (51 mm) plenum depth for installation.

#### Patented install Mounting frame:

- Pre-installed mounting bars for fast and toolless installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.
- Easy alignment of fixtures and present locking at 0°, 45°, & 90° with 360° rotation via toolless locking.

### Retrofit

 Easily updates legacy Calculite downlights to the latest LED technology. Includes light engine, trim, and driver mounted on cover plate that mounts to junction box of previous Calculite generations. Order with RH option code at end of light engine catalog number (see details on page 5).

### Compatibility:

Frames	Engines
With CFL S4118_series	Use Retrofit configuration C4R_ Trim + C4L_ Engine
With INC AS400_series	Use Retrofit configuration C4R_ Trim + C4L_ Engine
With LED C4L_N series C4X4L_N series P4RD_N_ series	Use Retrofit configuration C4R_ Trim + C4L_ Engine C4S_ Trim + C4L_ Engine C4R_ Trim + C4L_ Engine

\* Not available for retrofitting luminaires with integral emergency battery.

### **Emergency**

Bodine BSL6 6W battery pack with self-test/ diagnostic functionality. Factory or field mounted to frame.

- For remote ceiling mounted test switch, order standard trim (ex: C4SDLWCC). Optional accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

## **Dimming**

All configurations are FCC Class A unless otherwise specified.

- Advance 0-10V 1% (Z10), logarithmic curve is standard. Specify D2O for factory-set dimto-off function, consult factory for linear dimming curve.
- EldoLED SOLODrive (SOL) 0-10v 0.1%
- Lutron PEQ0 (L) Hi-Lume Premier 0.1% EcoSystem
- · Lutron LDE1 (LO1) EcoSystem 1%
- Electronic low voltage (E) forward or reverse phase dimming, Remodel and AirSeal IC Shallow are FCC Class B
- DALI (D) DT6 DALI 0.1%
- DMX (DMX) Digital Multiplexing with RDM 0.1%

#### **Dimming Options**

The following are factory-set options for the SOL, D, and DMX driver options (ex. DMXLIN):

- · SOL/D/DMX: Logarithmic (-) standard
- · SOL/D/DMX: Linear (LIN)
- · SOL/DMX: Square (SQR)
- Dim to Warm (D2W): option changes CCT from 3000-1800K gradually as it dims. Use with Z10 dimming only. Fixture-to-fixture consistency of ≤3SDCM at 2700K & 3000K, and ≤5SDCM at 1800K.

#### **Optical systems**

### Comfort throughout the space:

True 50° physical cutoff and 45° reflected cutoff.

## Quality of light:

 $2\ \mbox{SDCM}$  ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

## MesoOptics PET optical diffusion film:

Provides a smooth beam shape and mitigates color over angle with optimized luminaire efficiency. Mitigates LED pixilation.

### Light engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- · Ease and upgradability of technology.
- 347V light engines are Z10 dimming only and include dedicated 347V driver. For 347V non-Z10 dimming, order T347-75VA fieldinstalled step-down transformer accessory.

#### Flex engine (F)

- Frame-optional engine suited for new construction, remodel, and retrofit applications.
- 4RNSR new construction frame accessory available as required to support ceiling construction.
- All wiring is done on the integral j-box to the engine.

#### **Options and Accessories**

Flangeless mud-in ring: Use CA4SFT for use with flangless plaster installations.

CAEM6TSCP: Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws.

**Field Installed Emergency:** Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

CAEM6: Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch. Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

**SWCS:** Interact Ready System Bridge Accessory. Requires IRT9015 IR remote and Interact Pro App for commissioning.

**T347-75VA**: Field installable 347:120V 75VA step-down transformer, attaches to knock out on frame junction box, for use with non-IC (N) frames. Not for use with emergency options.

#### Title 24 exceptions

- 1000lm configurations

### **Labels and Listings**

- cULus listed for wet locations
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with \*LC suffix)
- Red List Declare label certified, ID SIG-0021 (View full Declare label)

## Warranty



5 year limited warranty

Visit Signify.com/warranties for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# Square Lensed Wall Wash

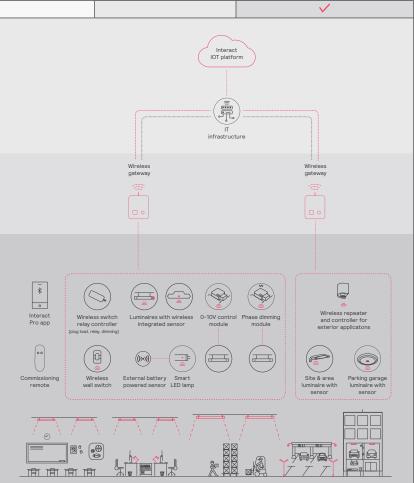
interact			To the state of th	The state of the s	
				yay Connected	
		Standalone	Option 1	Option 2	
Dimming, grouping, and zoning		<b>&gt;</b>	<b>✓</b>	<b>✓</b>	
Bluetooth and ZigBee enabled		<b>/</b>	<b>✓</b>	<b>~</b>	
Motion sensing and daylight harvesting		<b>~</b>	<b>✓</b>	<b>~</b>	
Integration with 0-10V and phase dimming fixtures		<b>~</b>	<b>✓</b>	<b>✓</b>	
Code compliance		<b>~</b>	<b>✓</b>	<b>✓</b>	
Granular dimming and dwell time		<b>~</b>	<b>✓</b>	<b>✓</b>	
Correlated color temperature (CCT) tuning by switch	New	<b>~</b>	<b>✓</b>	<b>✓</b>	
Support for sensor-based Tunable White luminaires	New	<b>~</b>	<b>✓</b>	<b>✓</b>	
Energy reporting and monitoring			<b>✓</b>	<b>✓</b>	
Scheduling			<b>✓</b>	<b>~</b>	
Demand response			<b>✓</b>	<b>✓</b>	
BMS integration (BACnet)				<b>✓</b>	
Floor plan visualization				<b>✓</b>	
IoT sensors for wellness				<b>✓</b>	
IoT Apps for productivity				<b>✓</b>	

# Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
Luminaires with integrated sensors	150
Smart TLEDS	150
· Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
Sensors	30
· Switches	50

Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



dildi

# Square Lensed Wall Wash

## Wireless controls options

#### Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity.
   The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote on-site to identify and group devices together.

#### Compatible with:

- SWS200 & UID8465 wireless scene switch
- Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
- Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
- LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
- LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

### Radio only sensor (RA or RADIO)

- Integral RA or RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & Bluetooth connectivity.
   The App provides flexibility to choose between a gateway or non-gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

#### Sensor bundle (IAOSB or SB)

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with SWS200 wireless scene switch, wireless Occ sensor (OCC SENSORIA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available. Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB or SB option in addition to occupancy and daylights sensing supports advanced IoT capabilities, such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: interact-lighting.com/interactproscalablesystem

#### **Emergency Options (ER100)**

- Power Sensing (factory default) –
  Recommended UL924 option requires unswitched
  power sense line, absence of voltage on the
  normal circuit triggers luminaire to 100% output.
- Power Interruption Detection (field option) –
  Detects AC power interruption >30ms triggers
  90 minute emergency mode with luminaire at
  100% output.

# Interact supported sensor option codes across Genlyte product lines

	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	-	SWZCSH	-	-

# Square Lensed Wall Wash

## Polished Reflectors Shown as round reflectors but represent the finish of Calculite square reflectors.



Specular clear (CL): Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



**Comfort clear (CC):** Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



White (WH): (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



Comfort clear diffuse (CD): Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.

#### **Flanges**



White (-): (matte) Provides the smoothest transition to ceilings when off.



**Polished (P):** (matches aperture) Produces a continuous look throughout the reflector (aperture matching).

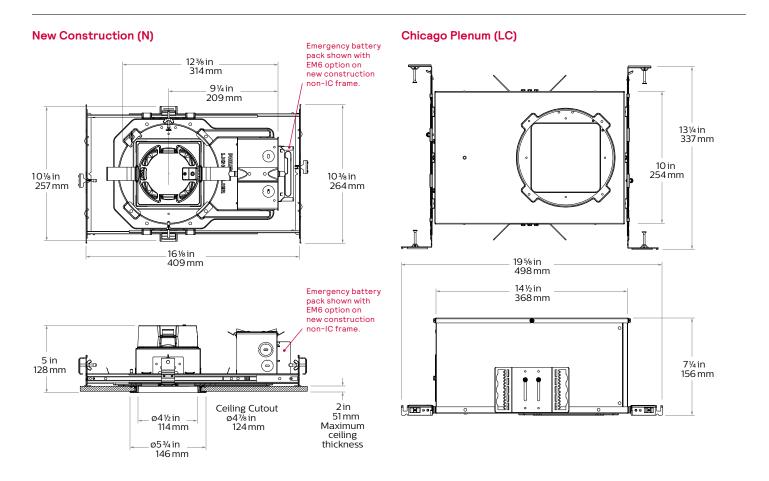


Flangeless (F): (flush-mount)Creates a flush, virtually seamless transition from aperture to ceiling.

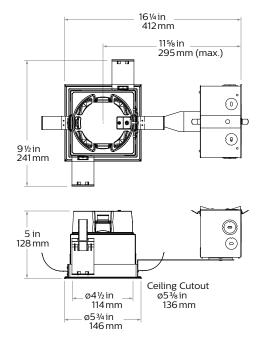


Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

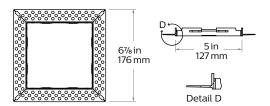
# Square Lensed Wall Wash



# Remodeler (R)

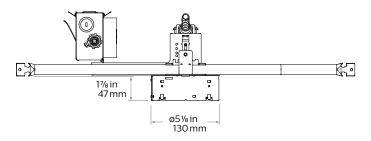


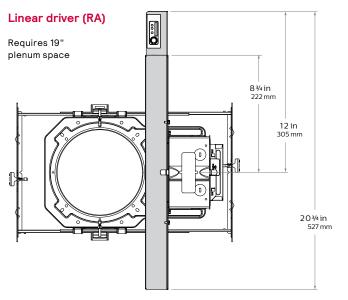
# Flangeless mud-in ring (CA4SFT) accessory

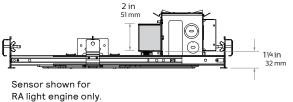


# Square Lensed Wall Wash

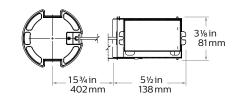
# Round tall collar frame (RH type light engine required)

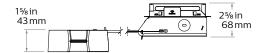




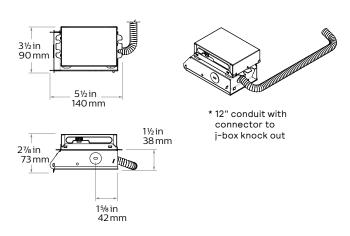


# Flex Install (F)

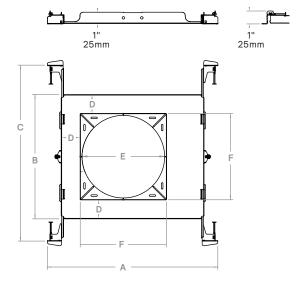




### LCEM6 Flex install (F) engine only



### 4RNSR Flex install non-IC frame



Α	В	С	D	E	F
10 ¾"	7¼"	13 %"	1"	4%"	5¼"
276mm	184mm	345mm	25mm	124mm	132mm

# Square Lensed Wall Wash

#### Electrical - Narrow

Light	Input	Input	Input	Drive	Input	LED	THD Factor	Power Factor
engine	Volts	Freq.		Current	Power	Power	@ Max	Load
	120V	50/60Hz	0.050A	0.15A	6.0W	4.8W	<10%	>0.9
500lm	277V	50/60Hz	0.023A	0.15A	6.3W	4.8W	<30%	>0.9
	347V	50/60Hz	0.020A	0.15A	7.0W	4.8W	N/A	>0.9
	120V	50/60Hz	0.072A	0.22A	8.7W	7.1W	<10%	>0.9
1000lm	277V	50/60Hz	0.032A	0.22A	8.9W	7.1W	<20%	>0.9
	347V	50/60Hz	0.029A	0.22A	10.1W	7.1W	<30%	>0.9
	120V	50/60Hz	0.108A	0.33A	12.9W	10.8W	<10%	>0.9
1500lm	277V	50/60Hz	0.047A	0.33A	13.0W	10.8W	<10%	>0.9
	347V	50/60Hz	0.043A	0.33A	14.8W	10.8W	<25%	>0.9
	120V	50/60Hz	0.147A	0.45A	17.6W	14.9W	<10%	>0.9
2000lm	277V	50/60Hz	0.064A	0.45A	17.7W	14.9W	<10%	>0.9
	347V	50/60Hz	0.056A	0.45A	19.6W	14.9W	<20%	>0.9
	120V	50/60Hz	0.180A	0.55A	21.6W	18.3W	<10%	>0.9
2500lm	277V	50/60Hz	0.078A	0.55A	21.7W	18.3W	<10%	>0.9
	347V	50/60Hz	0.066A	0.55A	22.9W	18.3W	<20%	>0.9
	120V	50/60Hz	0.231A	0.70A	27.7W	23.7W	<10%	>0.9
3000lm	277V	50/60Hz	0.100A	0.70A	27.6W	23.7W	<10%	>0.9
	347V	50/60Hz	0.083A	0.70A	28.9W	23.7W	<15%	>0.9

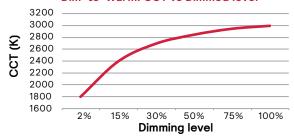
## Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam
500lm 1000lm 1500lm	L85 @ 55,000hrs.	L90 @ 60,000hrs.
2000lm	L85 @ 55,000hrs.	L80 @ 60,000hrs.

#### **Electrical - Medium & Wide**

Light	Input	Input	Input	Drive	Input	LED	THD Factor	Power Factor
engine	Volts	Freq.		Current		Power	@ Max Load	
	120V	50/60Hz	0.051A	0.15A	6.1W	4.8W	<10%	>0.9
500lm	277V	50/60Hz	0.023A	0.15A	6.4W	4.8W	<30%	>0.9
	347V	50/60Hz	0.020A	0.15A	7.1W	4.8W	N/A	>0.9
	120V	50/60Hz	0.084A	0.25A	10.1W	8.3W	<10%	>0.9
1000lm	277V	50/60Hz	0.037A	0.25A	10.3W	8.3W	<10%	>0.9
	347V	50/60Hz	0.034A	0.25A	11.7W	8.3W	<30%	>0.9
	120V	50/60Hz	0.117A	0.36A	14.0W	11.8W	<10%	>0.9
1500lm	277V	50/60Hz	0.051A	0.36A	14.1W	11.8W	<10%	>0.9
	347V	50/60Hz	0.046A	0.36A	16.0W	11.8W	<25%	>0.9
	120V	50/60Hz	0.153A	0.47A	18.4W	15.5W	<10%	>0.9
2000lm	277V	50/60Hz	0.067A	0.47A	18.5W	15.5W	<10%	>0.9
	347V	50/60Hz	0.059A	0.47A	20.3W	15.5W	<20%	>0.9
	120V	50/60Hz	0.197A	0.60A	23.6W	20.1W	<10%	>0.9
2500lm	277V	50/60Hz	0.085A	0.60A	23.6W	20.1W	<10%	>0.9
	347V	50/60Hz	0.072A	0.60A	24.9W	20.1W	<20%	>0.9
	120V	50/60Hz	0.247A	0.75A	29.7W	25.5W	<10%	>0.9
3000lm	277V	50/60Hz	0.107A	0.75A	29.7W	25.5W	<10%	>0.9
	347V	50/60Hz	0.087A	0.75A	30.4W	25.5W	<15%	>0.9

## Dim-to-Warm: CCT vs Dimmed level



## Narrow (Power over Ethernet)

-	Input				
Light engine	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10NPE	53V	51-54V	DC	160 mA	8.9 W
C4L15NPE	53V	51-54V	DC	250 mA	13.6 W
C4L20NPE	53V	51-54V	DC	340 mA	18.5 W
C4L25NPE	53V	51-54V	DC	460 mA	24.6 W

- 1. Nominal input volts.
- Preferred volt range.

# Medium (Power over Ethernet)

	Input				
Light engine	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10MPE	53V	51-54V	DC	160 mA	8.8 W
C4L15MPE	53V	51-54V	DC	250 mA	13.4 W
C4L20MPE	53V	51-54V	DC	320 mA	17.6 W
C4L25MPE	53V	51-54V	DC	430 mA	23.2 W

# Wide (Power over Ethernet)

	Input				
Light engine	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10WPE	53V	51-54V	DC	160 mA	8.8 W
C4L15WPE	53V	51-54V	DC	250 mA	13.4 W
C4L20WPE	53V	51-54V	DC	320 mA	17.6 W
C4L25WPE	53V	51-54V	DC	430 mA	23.2 W

# Lifetime (TM-21 data)

Lumens	Narrow beam	Medium/Wide beam*
500lm 1000lm 1500lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
2000lm 2500lm 3000lm*	L90 @ 60,000hrs.	L85 @ 60,000hrs.

<sup>\*</sup> Lutron 3000lm with Medium/Wide beam is L80 @ 60,000hrs.

# Marked spacing applications

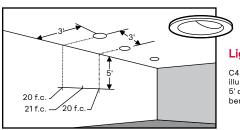
3000lm
Х
Х
Х
Х
Х
Х
Х
Х

Modules marked with an X require marked spacing:

- Center-to-center of adjacent luminaires: 24" (610mm)
- Luminaire center to side building member: 12" (305mm)

In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

# Square Lensed Wall Wash



# **Lighting Data - Example**

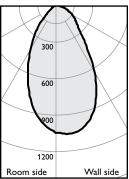
C4RWWCL / C4L15935W illumination on the wall 5' down from the ceiling is 20 f.c. beneath and 21 f.c. between fixtures.

#### Adjustment factors

Finish	ССТ	Lumens
CL = 100% CC = 95% CD = 87% CZ = 63% WH = 87% BK = 57%	90CRI, 4000K = 102% 90CRI, 3500K = 100% 90CRI, 3000K = 96% 90CRI, 2700K = 92%	3000lm = 200% 2500lm = 167% 2000lm = 133% 1500lm = 100% 1000lm = 67% 500lm = 33%

#### Lensed Wall Wash, 1500lm Engine, 86 lm/W at 14W

#### Candela Curve



#### 4SN / C4L15935M / C4SLWCL

Output lumens: 1198 lms Input watts: 14.0 W CRI: 90 min CCT¹: 3500K

Efficacy: 85.6 lm/w Report<sup>2</sup>: STMR-1858

#### Multiple unit data

Footcandles on wall

		2' from wall			
		5	2' on ctr		
Į,	1	43	46	43	
ee	2	63	67	63	
i.	2 3 4	60	65	60	
Ę.	4	52	56	52	
Distance from ceiling in feet	5	40	43	40	
õ		30	32	30	
Ö	6 7	22	23	22	
<u>ا</u>	8	17	17	17	
õ	9	13	13	13	
ta	10	10	11	10	
ä	12	8	9	8	
	14	7	7	7	

#### Multiple unit data

Footcandles on wall

	3' from wall			
	4	3' on ctr		
1	9	9	9	
2	16	16	16	
3	18	18	18	
4	18	17	18	
5	17	17	17	
6	15	15	15	
7	13	13	13	
8	11	11	11	
9	9	10	9	
10	8	8	8	
12	7	7	7	
14	6	6	6	
	4 5 6 7 8 9 10 12	1 9 16 18 18 19 10 19 10 8 12 7	3' on ctr  1	

a (s)ignify business

<sup>1.</sup> Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

<sup>2.</sup> Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.