



**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.

**Standard luminaire:** Complete luminaire = Frame + Engine + Trim + Accessories (optional)

**Flex install luminaire:** Complete luminaires = Engine (F) + Trim + Accessories (optional)

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

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

**Step 1** Frame: Ordered & shipped separately.

**Frame** **Example:** 4RN

**4S**

**Step 2** Engine & Trim: Ordered & shipped as a single product.

**Engine** **Example:** C4L15935MZ10U-C4SDLNMCC

**C4L** - **C4S**

**Step 3 (optional)** Accessories: Ordered & shipped separately.

**Frame** **Example:** 4SN

Series	Installation	Voltage/Options
<b>4S</b>		
4S 4" Non-IC Square	N New construction	— Universal 120/277/347V <b>EM6</b> Emergency, 6W Self-Test/Self-Diagnostic <sup>1</sup> LC Chicago Plenum <sup>2</sup> <b>BAC</b> Meets the requirements of the Buy American Act of 1933 (BAA) <sup>9,10</sup> <b>BABAF</b> Meets the requirements of the Build America Buy America Act for projects funded through FHWA that are obligated before October 1, 2026, and meets the Buy America preferences for FTA <sup>9,10</sup>
	R Remodeler	— Universal 120/277/347V <b>BAC</b> Meets the requirements of the Buy American Act of 1933 (BAA) <sup>9,10</sup> <b>BABAF</b> Meets the requirements of the Build America Buy America Act for projects funded through FHWA that are obligated before October 1, 2026, and meets the Buy America preferences for FTA <sup>9,10</sup>

**Engine** **Example:** C4L20930MZ10D20UF

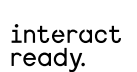
Series	Lumens	CRI/CCT	Beam <sup>5</sup>	Dimming	Options	Voltage	Options
<b>C4L</b>							
C4L Calculite LED 4" gen 3	05 500lm	927 90CRI/2700K	N Narrow (45°)	Z10 0-10V 1%	-- None <b>D20</b> Dim to Off	U 120/277V 3 347V (Z10 only)	<b>F</b> Flex install <sup>7</sup> (no frame required) <b>RH</b> Retrofit for tall collar frame <sup>8</sup> <b>BAC</b> Meets the requirements of the Buy American Act of 1933 (BAA) <sup>9,10</sup> <b>BABAF</b> Meets the requirements of the Build America Buy America Act for projects funded through FHWA that are obligated before October 1, 2026, and meets the Buy America preferences for FTA <sup>9,10</sup>
	10 1000lm	930 90CRI/3000K					
	15 1500lm	935 90CRI/3500K	M Medium (58°) & Wide (69°) <sup>4</sup>	L01 Lutron PEQO EcoSystem 0.1% (up to 2000lm) L1 Lutron LDE1 EcoSystem (500lm not available) RA Integral Interact RF sensor <sup>6</sup> (enables wireless connected lighting control)	U 120/277V		
	20 2000lm	940 90CRI/4000K					
	25 2500lm	950 90CRI/5000K <sup>3</sup>					
30 3000lm*	D2W 90CRI/3000K to 1800K <sup>4</sup> (dim-to-warm)		D DALI 0.1%	-- None <b>LIN</b> Linear	U 120/277V		
				SOL EldoLED Solo 0-10V 0.1% DMX Digital Multiplexing w/RDM 0.1%	-- None <b>LIN</b> Linear <b>SQR</b> Square	U 120/277V	
				E Forward & Reverse Phase (up to 2500lm)		1 120V	

\* See marked spacings requirements on page 9.

**Trim** **Example:** C4SDLCCP

Series	Aperture	Style	Beam <sup>5</sup>	Finish	Flange	Options
<b>C4</b>	<b>S</b>	<b>DL</b>				
C4 Calculite LED 4" gen 3	S Square	DL Downlight	NM Narrow (45°) & Medium (58°) W Wide (69°)	CL Specular clear CC Comfort clear CD Comfort clear diffuse BK Black (matte)	- White (matte) P Polished (matches aperture) F Flangeless (requires CA4SFT)	<b>IEM6</b> Trim mounted EM test switch <b>BAC</b> Meets the requirements of the Buy American Act of 1933 (BAA) <sup>9,10</sup> <b>BABAF</b> Meets the requirements of the Build America Buy America Act for projects funded through FHWA that are obligated before October 1, 2026, and meets the Buy America preferences for FTA <sup>9,10</sup>
				WH White (matte)		

\*See footnotes on page 2.



# C4SDL Calculite LED 4" gen 3

## Square Downlight

### Accessories<sup>9</sup>

<b>SWCS</b>	Interact Ready System Bridge Accessory (refer to <a href="#">SWCS spec sheet</a> for options and details)
<b>4RNSR</b>	4" round/square non-IC frame with Flex (F) light engine (provides mechanical support for rough-in construction only, no junction box)
<b>LCEM6</b>	Field installable Bodine BSL06 emergency battery pack (for Flex (F) light engine only, includes switch mounting plate)
<b>T347-75VA</b>	347:120V step-down transformer for non-IC (N) frame only (see page 3)
<b>CA4SFT</b>	Mud-in ring for use in 4" square flangeless trim installations (ordered with a flangeless trim)
<b>CAEM6</b>	Field-installable Bodine BSL6 6W battery pack with self-test/self-diagnostic (for new construction frames, 120-277V) (see page 3 for details)
<b>CAEM6TSCP</b>	Emergency test switch mounting plate. Must be ordered with EM6 frame for remote test switch (see page 3)

### Beam options

<b>Narrow engine</b>	45° (0.7 s.c.) with narrow & medium trim
	Not recommended with wide trim
<b>Medium engine</b>	58° (0.9 s.c.) narrow & medium trim
	69° (1.2 s.c.) with wide trim

### Footnotes

- Emergency (EM6) frame is compatible with reflector mounted test switch when trim is ordered with IEM6 option code (not compatible with 347V or Power over Ethernet configurations).  
For remote mount switch, order standard trim and CAEM6TSCP mounting plate accessory.
- Chicago plenum (LC) frame option not available with BAC nor EM6 options.
- Consult factory for 5000K CCT (50) with narrow (N) beam.
- Dim-to-warm (D2W) available only with Z10 dimming up to 2000lm.  
Narrow (N) and medium (M) beam engines only.
- See Beam options table above for light engine and trim combination spacing criterion.
- Linear driver profile (see page 8).
- Flex install option requires light engine (F)/trim only (up to 2500lm).  
For use only with optional 4RNSR new construction frame accessory.  
Not available with Interact (RA) dimming and IEM6 trim options. See page 3 for further details.
- Retrofits select legacy luminaires (E & Z10 dimming only see pages 3 & 8).

### Square Downlight

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

Lumen Package	Beam	Flux (lm)	Efficacy (lm/W)	Beam Angle	CBCP	CRI	R9	IES TM-30-18			UGR
								R <sub>f</sub>	R <sub>g</sub>	R <sub>cs,ht</sub>	
500 lm	Narrow (N)	617	102	40°	1409	90+	50+	92	100	-5%	0
	Medium (M)	545	89	57°	769	90+	50+	91	99	-6%	0
	Wide (W)	413	67	74°	378	90+	50+	91	99	-6%	0
1000 lm	Narrow (N)	916	106	40°	2094	90+	50+	92	100	-5%	0
	Medium (M)	921	91	57°	1300	90+	50+	91	99	-6%	0
	Wide (W)	696	69	74°	638	90+	50+	91	99	-6%	0
1500 lm	Narrow (N)	1364	101	40°	3118	90+	50+	92	100	-5%	1
	Medium (M)	1317	94	57°	1859	90+	50+	91	99	-6%	1
	Wide (W)	1002	72	74°	917	90+	50+	91	99	-6%	0
2000 lm	Narrow (N)	1800	102	40°	4115	90+	50+	92	100	-5%	2
	Medium (M)	1690	92	57°	2385	90+	50+	91	99	-6%	2
	Wide (W)	1287	70	74°	1178	90+	50+	91	99	-6%	1
2500 lm	Narrow (N)	2133	99	40°	4875	90+	50+	92	100	-5%	3
	Medium (M)	2120	90	57°	2992	90+	50+	91	99	-6%	3
	Wide (W)	1615	68	74°	1479	90+	50+	91	99	-6%	2
3000 lm	Narrow (N)	2619	94	40°	5987	90+	50+	92	100	-5%	3
	Medium (M)	2609	88	57°	3682	90+	50+	91	99	-6%	3
	Wide (W)	1954	66	74°	1790	90+	50+	91	99	-6%	2

- BAA and compliance requires that BAC option be selected for each of frame, engine, and trim. BABA compliance requires that BABAF 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- or BABA-compliant.
- 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. Genlyte's products with a BAC option code designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. "BABAF" designates the product will meet the standards set by FHWA for BABA and FTA for Buy America. As noted, for FHWA BABA compliance, applicable projects must be funded by October 1, 2026.



## 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 Lightlior 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 CRI<sup>1</sup>
- 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>g</sub> up to 67 CRI
- G<sub>a</sub> up to 99 CRI
- C<sub>9</sub> up to 94 CRI
- R<sub>f</sub> up to 92 TM-30
- R<sub>r,ht</sub> up to 91 TM-30
- R<sub>g</sub> up to 100 TM-30
- R<sub>cs,ht</sub> up to -5% TM-30

### Achieve color balance

#### Best in class color consistency:

- Promote aesthetic harmony in your space with ≤ 2 SDCM

# C4SDL Calculite LED 4" gen 3

## Square Downlight

### 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) including PoE frame 4.88" (124 mm) plenum depth for installation.**

#### Patented install Mounting frame:

- Pre-installed mounting bars for fast and tool-less 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 tool-less 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 7).

#### Compatibility:

Frames	Engines
<b>With CFL</b> S4118_series	<b>Use Retrofit configuration</b> C4R_ Trim + C4L_ Engine
<b>With INC</b> AS400_series	<b>Use Retrofit configuration</b> C4R_ Trim + C4L_ Engine
<b>With LED</b> C4L_N series C4X4L_N series P4RD_N_series	<b>Use Retrofit configuration</b> 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 trim with integral emergency test switch, order trim with IEM6 option (ex: C4SDLWCCIEEM6).
- 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 D20 for factory-set dim-to-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 (L01) 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 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 field-installed 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 flangeless 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. To mount test switch to trim for new construction frame, order trim with IEM6 option code (e.g. C4SDLWCCIEEM6). 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

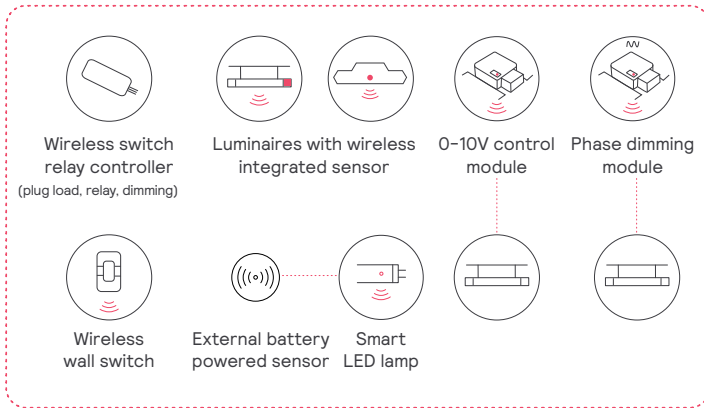


5 year limited warranty  
Visit [Signify.com/warranties](https://www.signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# C4SDL Calculite LED 4" gen 3

## Square Downlight

### Signify interact **Easy. Effective. Smart.**



### Meet Interact

A smart, wireless luminaire level lighting control system (LLLC). A complete solution that combines modern and intuitive technologies for easy installation and specification.

- Works with or without gateway
- **No** IT
- **No** light point restrictions
- **Up to 75%** out of the box savings
- **Fast & easy**
- **Code & rebates** compliant

### Capabilities

- Luminaire integrated occupancy and daylight sensing
- BMS integration
- Human-centric lighting
- Connectivity & insights
- Full Automation\*
- Security

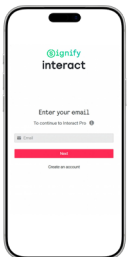
\*Grouping, zoning, dimming, high-end trimming, scenes, scheduling, manual controls

### Benefits

- Up to 80% installation savings<sup>1</sup>**  
Compared to installation costs of wired systems
- Up to 5 min faster setup time<sup>2</sup>**  
Compared to similar wireless systems
- Less than 2 year payback**  
Implement deep energy-saving strategies and claim utility rebates
- 1.8x more energy savings**  
Compared to conventional control systems
- Up to 2x utility rebates**  
Network Interact ready devices and get more utility rebates<sup>3</sup>

1. Versus legacy systems based on installer interviews
2. Based on installer analysis done by Signify for a typical multi-zone space
3. Utility programs across US

### Just lights and an App



1. Install the Interact ready fixtures with embedded smart sensor
2. Install the wireless wall switch
3. Configure your setup with the Interact App
4. Leverage the IRT9015 remote accessory to accelerate your setup process
5. Optionally add a gateway for insights and management

### Learn more about Interact:

Interact includes an app, a web portal, and a comprehensive range of Interact ready wireless luminaires, lamps, retrofit kits, and control devices like switches and sensors that operate within the same system.



# C4SDL Calculite LED 4" gen 3

## Square Downlight

### Controls Options\*

#### Interact radio node for Standalone,

#### Gateway & Gateway + IoT tiers (RA)

- RA sensor option is a connected radio node supporting wireless mesh connectivity.
- Compatible with standalone and gateway modes of Interact.

#### Interact occupancy & daylight sensor for Standalone, Gateway & Gateway + IoT tiers

#### (CS)

- The CS sensor option is a connected sensor with built-in occupancy and daylight detection, along with wireless mesh connectivity.
- Compatible with standalone and gateway modes of Interact.

#### Interact advanced sensor bundle for

#### Gateway + IoT tier (SB)

- SB sensor option offers occupancy and daylight sensing and supports advanced IoT capabilities, such as desk-level temperature and humidity monitoring, noise classification, and Bluetooth Low Energy (BLE) beacon functionality.
- Setup requires a compatible gateway and internet connectivity.
- With compatible gateway and software analytics, SB sensor option enables greater building efficiency, seamless system integration, and optimized space utilization through occupancy and environmental insights.

Interact for intelligent buildings sensor option codes across Genlyte product lines\*

	Sensor part #	Daybrite	Ledalite	Lightolier
Zigbee + Bluetooth	SC100B	RADIO	RA	RA
Zigbee + Bluetooth + Sensing	SC200B	SWZCS	CS	SBA or SWCS accessory
Zigbee + Bluetooth + Sensing + Environmental data	SC1500	IAOSB	SB	SBA or SWCS accessory
Zigbee + Highbay + Bluetooth + Sensing	SNH210 IA	SWZCSH	-	-

# C4SDL Calculite LED 4" gen 3

## Square Downlight

**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.



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



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

### Flanges



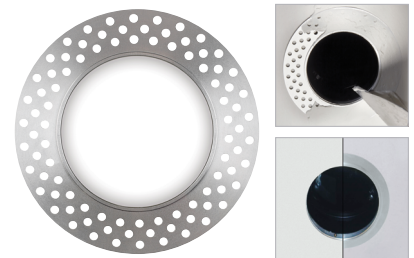
**White (-):** (matte) Provides the smoothest transition to ceilings when off.



**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.

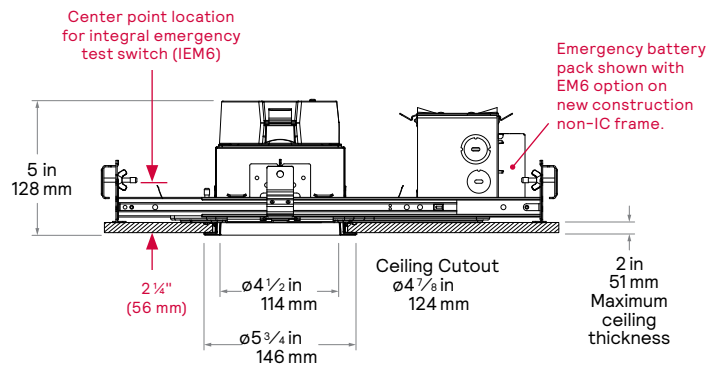
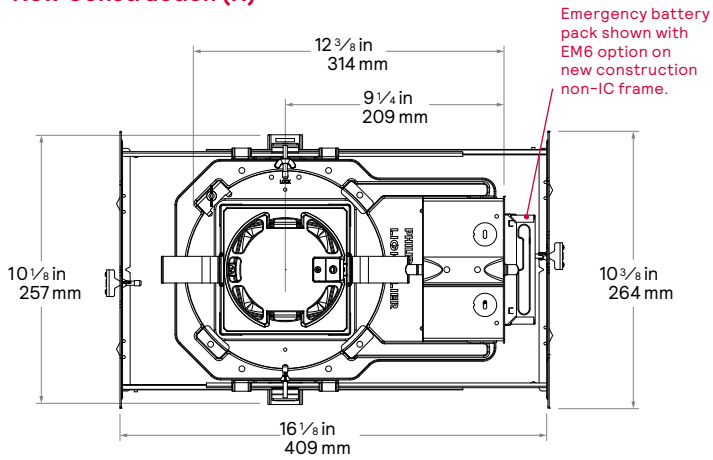


**Mud-in ring (FT):** Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

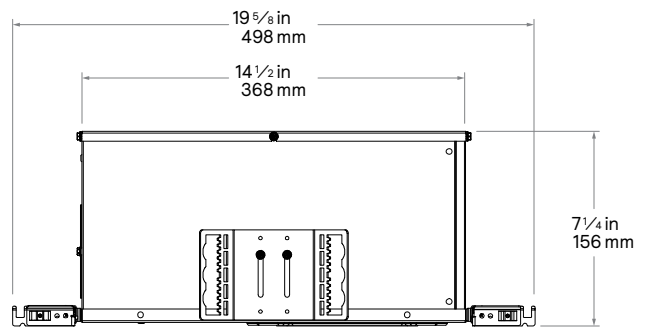
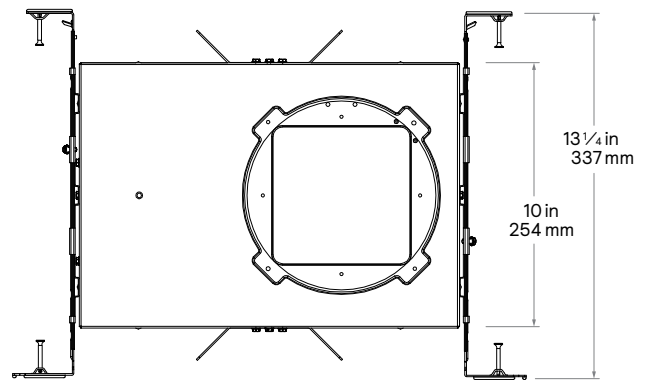
# C4SDL Calculite LED 4" gen 3

## Square Downlight

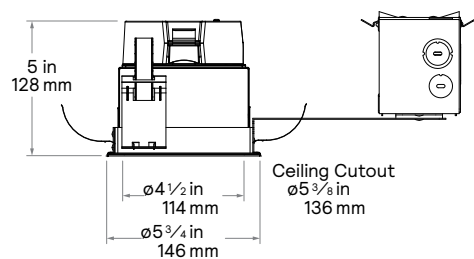
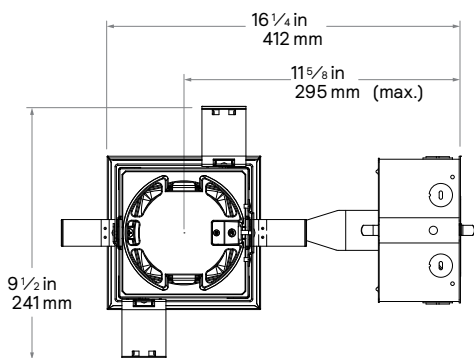
### New Construction (N)



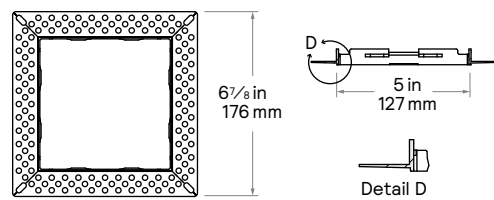
### Chicago Plenum (LC)



### Remodeler (R)



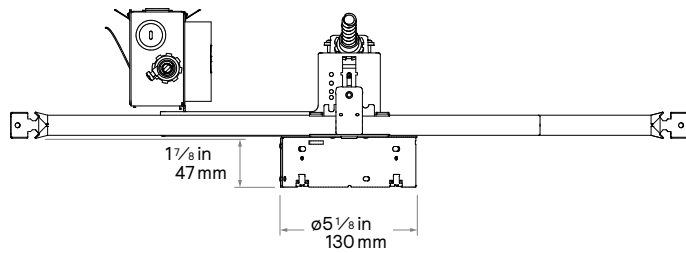
### Flangeless mud-in ring (CA4SFT) accessory



# C4SDL Calculite LED 4" gen 3

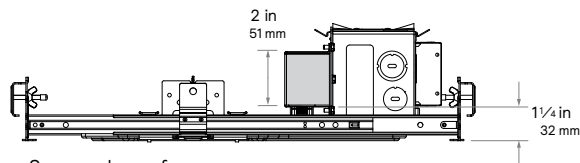
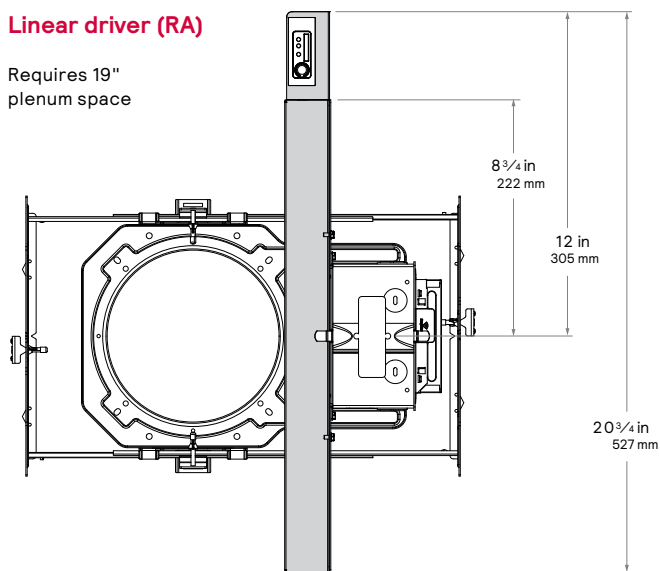
## Square Downlight

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



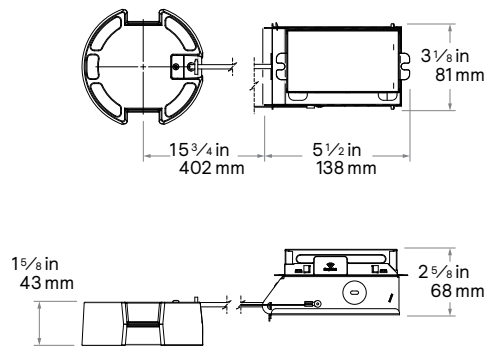
### Linear driver (RA)

Requires 19" plenum space

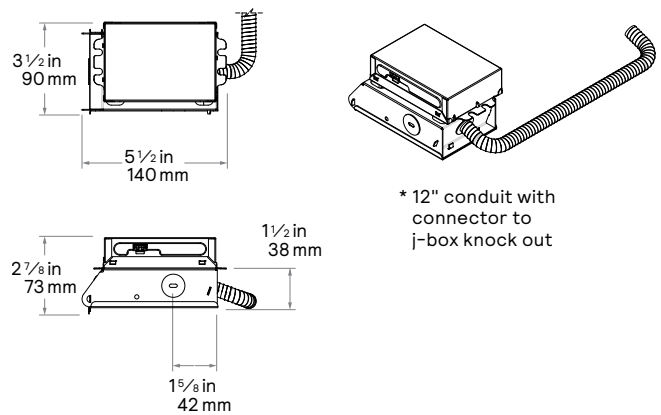


Sensor shown for RA light engine only.

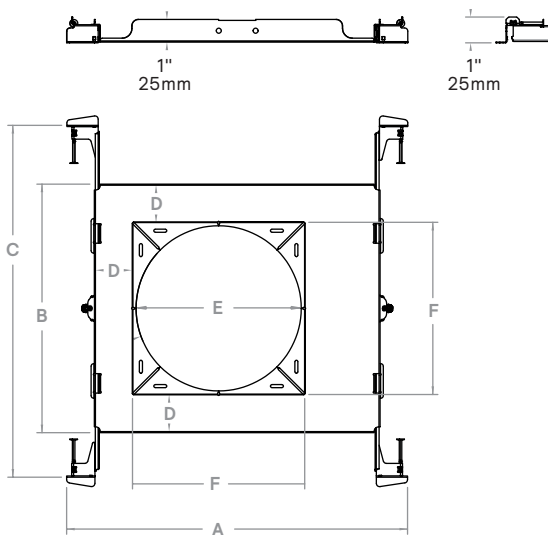
### Flex Install (F)



### LCEM6 Flex install (F) engine only



### 4RNSR Flex install non-IC frame



A	B	C	D	E	F
10 7/8"	7 1/4"	13 5/8"	1"	4 7/8"	5 1/4"
276mm	184mm	345mm	25mm	124mm	132mm

# C4SDL Calculite LED 4" gen 3

## Square Downlight

### Electrical - Narrow

Light engine	Input Volts	Input Freq.	Input Current	Drive Current	Input Power	LED Power	THD	Power
							Factor @ Max Load	Factor
500lm	120V	50/60Hz	0.050A	0.15A	6.0W	4.8W	<10%	>0.9
	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
1000lm	120V	50/60Hz	0.072A	0.22A	8.7W	7.1W	<10%	>0.9
	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
1500lm	120V	50/60Hz	0.108A	0.33A	12.9W	10.8W	<10%	>0.9
	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
2000lm	120V	50/60Hz	0.147A	0.45A	17.6W	14.9W	<10%	>0.9
	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
2500lm	120V	50/60Hz	0.180A	0.55A	21.6W	18.3W	<10%	>0.9
	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
3000lm	120V	50/60Hz	0.231A	0.70A	27.7W	23.7W	<10%	>0.9
	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

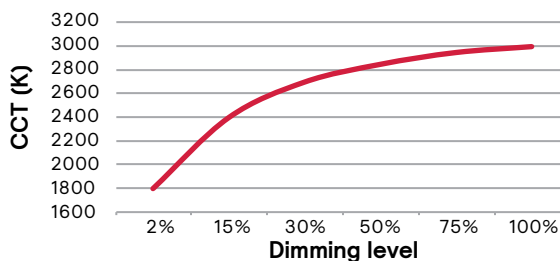
### Electrical - Medium & Wide Downlights

Light engine	Input Volts	Input Freq.	Input Current	Drive Current	Input Power	LED Power	THD	Power
							Factor @ Max Load	Factor
500lm	120V	50/60Hz	0.051A	0.15A	6.1W	4.8W	<10%	>0.9
	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
1000lm	120V	50/60Hz	0.084A	0.25A	10.1W	8.3W	<10%	>0.9
	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
1500lm	120V	50/60Hz	0.117A	0.36A	14.0W	11.8W	<10%	>0.9
	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
2000lm	120V	50/60Hz	0.153A	0.47A	18.4W	15.5W	<10%	>0.9
	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
2500lm	120V	50/60Hz	0.197A	0.60A	23.6W	20.1W	<10%	>0.9
	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
3000lm	120V	50/60Hz	0.247A	0.75A	29.7W	25.5W	<10%	>0.9
	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

### Lifetime (TM-21) data

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

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



### Narrow (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10__NPE	53V	51-54V	DC	160 mA	8.9 W
C4L15__NPE	53V	51-54V	DC	250 mA	13.6 W
C4L20__NPE	53V	51-54V	DC	340 mA	18.5 W
C4L25__NPE	53V	51-54V	DC	460 mA	24.6 W

### Medium (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10__MPE	53V	51-54V	DC	160 mA	8.8 W
C4L15__MPE	53V	51-54V	DC	250 mA	13.4 W
C4L20__MPE	53V	51-54V	DC	320 mA	17.6 W
C4L25__MPE	53V	51-54V	DC	430 mA	23.2 W

### Wide (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
C4L10__WPE	53V	51-54V	DC	160 mA	8.8 W
C4L15__WPE	53V	51-54V	DC	250 mA	13.4 W
C4L20__WPE	53V	51-54V	DC	320 mA	17.6 W
C4L25__WPE	53V	51-54V	DC	430 mA	23.2 W

- Nominal input volts.
- Preferred volt range.

### Lifetime (TM-21 data)

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

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

### Marked spacing applications

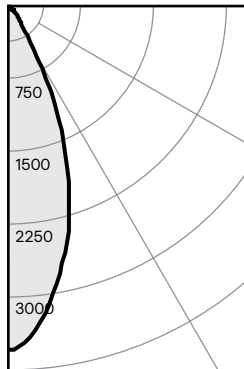
Light engine	3000lm	
C4L_Z10 series	X	Modules marked with an X require marked spacing: - Center-to-center of adjacent luminaires: 24" (610mm)
C4L_L01 series	X	
C4L_L1 series	X	
C4L_LD series	X	- Luminaire center to side building member: 12" (305mm)
C4L_LTE series	X	
C4L_D series	X	In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.
C4L_DMx series	X	
C4L_RA series	X	

# C4SDL Calculite LED 4" gen 3

## Square Downlight

### Narrow beam, 1500lm Engine, 101lm/W at 14W

#### Candela Curve



#### 4SN / C4L15935N / C4SDLNMCL

Output lumens: 1365 lms  
 Input watts: 13.5 W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 Spacing Crit.: 0.66  
 Beam Angle: 40°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	1170	85.7%
0-40	1309	95.9%
0-60	1363	99.9%
0-90	1365	100.0%

Angle	Mean CP	Lumens
0	2819	
5	2660	
10	2310	242
15	1911	
20	1421	523
25	901	
30	427	405
35	204	
40	118	139
45	63	
50	18	49
55	3	
60	2	5
65	1	
70	1	1
75	0	
80	0	1
85	0	
90	0	0

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	102	4.8'
6'	80	5.4'
7'	65	6.0'
8'	45	6.6'
9'	14	9.2'

\* Beam diameter is where foot-candles drop to 50% of maximum.

#### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	64.0	0.60
6'	41.0	0.39
7'	30.0	0.28
8'	25.0	0.23
9'	38.0	0.19

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 101.1lm/W  
 Report<sup>2</sup>: STMR-2431

#### Adjustment factors

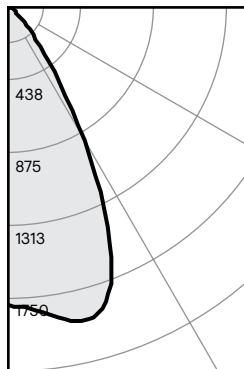
Finish	CCT	Lumens
CL = 100%	90CRI, 4000K = 102%	3000lm = 200%
CC = 95%	90CRI, 3500K = 100%	2500lm = 167%
CD = 87%	90CRI, 3000K = 96%	2000lm = 133%
CZ = 63%	90CRI, 2700K = 92%	1500lm = 100%
WH = 87%		1000lm = 67%
BK = 57%		500lm = 33%

#### Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10			
Wall	Zonal cavity method - Effective floor reflectance = 20%																				
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100	100	
	1	114	112	109	108	110	106	106	103	103	97	97	93	93	88	88	85	85	81	81	
	2	109	105	102	99	103	97	95	91	91	84	84	77	77	71	71	69	69	63	63	
	3	105	99	95	91	98	91	88	85	81	77	73	69	65	61	57	54	50	46	42	
	4	100	94	89	85	93	85	81	77	73	69	65	61	57	53	49	45	41	37	33	
	5	96	89	84	80	88	80	76	72	68	64	60	56	52	48	44	40	36	32	28	
	6	92	85	80	76	84	76	72	68	64	60	56	52	48	44	40	36	32	28	24	
	7	89	81	75	72	80	72	68	64	60	56	52	48	44	40	36	32	28	24	20	
	8	85	77	72	68	76	68	64	60	56	52	48	44	40	36	32	28	24	20	16	
	9	82	74	69	65	73	65	61	57	53	49	45	41	37	33	29	25	21	17	13	
	10	79	70	65	62	70	62	58	54	50	46	42	38	34	30	26	22	18	14	10	

### Medium beam, 1500lm Engine, 94lm/W at 14W

#### Candela Curve



#### 4SN / C4L15935M / C4SDLNMCL

Output lumens: 1317 lms  
 Input watts: 14.0 W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 Spacing Crit.: 0.98  
 Beam Angle: 57°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	1045	79.3%
0-40	1261	95.7%
0-60	1316	99.9%
0-90	1317	100.0%

Angle	Mean CP	Lumens
0	1426	
5	1453	
10	1511	141
15	1534	
20	1404	426
25	1071	
30	656	478
35	328	
40	150	216
45	60	
50	16	51
55	3	
60	1	4
65	1	
70	0	1
75	0	
80	0	0
85	0	
90	0	0

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	57	4.9'
6'	40	5.9'
7'	29	6.9'
8'	22	7.8'
9'	18	8.8'

\* Beam diameter is where foot-candles drop to 50% of maximum.

#### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	61.0	0.62
6'	40.0	0.41
7'	28.0	0.29
8'	24.0	0.24
9'	19.0	0.19

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 94.1lm/W  
 Report<sup>2</sup>: STMR-1857

#### Adjustment factors

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

#### Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10			
Wall	Zonal cavity method - Effective floor reflectance = 20%																				
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100	100	
	1	114	111	109	107	109	105	105	102	101	99	94	94	88	88	83	83	77	77	71	
	2	109	104	100	97	102	96	99	94	96	92	88	84	80	76	72	68	64	60	56	
	3	103	97	93	89	96	88	93	87	91	85	83	79	75	71	67	63	59	55	51	
	4	99	91	86	82	90	82	88	81	86	80	77	73	69	65	61	57	53	49	45	
	5	94	86	80	76	85	76	83	75	82	75	73	69	65	61	57	53	49	45	41	
	6	90	81	75	71	80	71	79	71	77	70	68	64	60	56	52	48	44	40	36	
	7	85	77	71	67	76	67	75	66	73	66	64	60	56	52	48	44	40	36	32	
	8	81	72	67	63	72	63	71	62	70	62	61	57	53	49	45	41	37	33	29	
	9	78	69	63	59	68	59	67	59	66	59	57	53	49	45	41	37	33	29	25	
	10	74	65	60	56	65	56	64	56	63	55	54	50	46	42	38	34	30	26	22	

1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

