



Calculite LED 6" generation 3 provides excellent performance coupled with optimized installation flexibility via UniFrame. 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)

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 and engine will be ordered/shipped together; trim will be ordered/shipped separately. Accessories (optional) are not currently BAA-compliant.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____

Frame

standard example: 6SN | **BAC example:** 6SN-BAC

Series	Installation	Voltage/Options
6S		
6S 6" Non-IC Square	N New construction	— Universal 120/277/347V EM6 Emergency, 6W Self-Test/Self-Diagnostic ¹ LC Chicago Plenum ² BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
	R Remodeler	— Universal 120/277/347V BAC Meets the requirements of the Buy American Act of 1933 (BAA)**

Engine

standard example: C6L15935NZ10U | **BAC example:** C6L15935NZ10U-BAC

Series	Lumens	CRI	CCT	Beam ⁶	Dimming	Options	Voltage	Options
C6L								
C6L Calculite LED 6" gen 3	10 1000lm	8 80CRI 9 90CRI	27 2700K	N Narrow (37°) M Medium (56°) & Wide (65°)	Z10 0-10V 1%	— None	U 120/277V 3 347V (Z10 only)	RH Retrofit for square ⁵ BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
	15 1500lm		30 3000K			D20 Dim to Off		
	20 2000lm	35 3500K	L01 Lutron PEQ0 EcoSystem 0.1% (up to 2000lm) LI Lutron LDE1 EcoSystem (up to 3500lm) RA Integral Interact Pro RF sensor ⁴ (enables wireless connected lighting control)		U 120/277V			
	25 2500lm	40 4000K	D DALI 0.1% ⁴		— None LIN Linear	U 120/277V		
	30 3000lm		SOL EldoLED Solo 0-10V 0.1% DMX Digital Multiplexing w/RDM 0.1%	— None LIN Linear SQR Square	U 120/277V			
	35 3500lm		E Forward & Reverse Phase (up to 2500lm) LTE Lutron LTE Hi-Lume Phase Cut 1% (up to 3500lm)	1 120V				
	48 4800lm ³ 60 6000lm ³		P Power over Ethernet (PoE) only compatible with 1000 (10) to 2500 (25) lumen configurations	E Ethernet 48V DC				

Trim

standard example: C6SDLNMCCP | **BAC example:** C6SDLNMCCP-BAC

Series	Aperture	Style	Beam ⁶	Finish	Flange	Options
C6	S	DL				
C6 Calculite LED 6" gen 3	S Square	DL Downlight	NM Narrow & Medium W Wide	CL Specular clear	— White (matte) P Polished (matches aperture) F Flangeless (requires CA6SFT)	IEM6 Trim mounted EM test switch BAC Meets the requisites of the Buy American Act of 1933 (BAA)**
				CC Comfort clear CD Comfort clear diffuse		
				WH White (matte)	— White (matches finish) F Flangeless (requires CA6SFT)	

Beam options

Accessories (Not currently BAA-compliant) learn more on page 2

Trim	Nar. engine	Med. engine	SBA	Interact Ready System Bridge Accessory (refer to Philips System Bridge Accessory spec sheet for options/details)
Narrow & Medium	37° (0.6 s.c.)	56° (0.9 s.c.)	AMS	ActiLume multi-sensor (optional accessory for PoE configurations)
			CA6SFT	Mud-in ring for use in 6" square flangeless trim installations (ordered with a flangeless trim)
Wide	Not recommended	65° (1.1 s.c.)	CAEM6	Field-installable Bodine BSL6 6W battery pack with self-test/self-diagnostic (for new construction, 120-277V)
			CAEM6TSCP	Must be ordered with EM6 frame for remote test switch (see page 2 for details)
			T347-75VA	347:120V step-down transformer for non-IC (N) frame only (see page 2 for details)

- 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 is not available for Buy American Compliant (BAC) configurations.
- See marked spacings requirements on page 7.
- DALI 4800lm and 6000lm, and all RA options require linear driver configuration (see page 6).
- Retrofits select legacy Lightolier luminaires (see pages 2 and 6).
- See beam options table for light engine and trim combination spacing criterion.

** 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.



C6SDL Calculite LED 6" 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 2.75" (70 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 5).

Compatibility:

Frames	Engines
With CFL S6132_series	Use Retrofit configuration C6R_Trim + C6L_Engine
With INC BS600_series	Use Retrofit configuration C6R_Trim + C6L_Engine
With LED C6L_N series C6X6L_N series P6RD_N_series	Use Retrofit configuration C4R_Trim + C6L_Engine C6S_Trim + C6L_Engine C6R_Trim + C6L_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: C6SDLWCCIEM6).
- For remote ceiling mounted test switch, order standard trim (ex: C6SDLWCC). 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%
- Lutron LTE (LTE) Hi-Lume 2-wire phase cut 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)

Power over Ethernet

Powered via Lightolier PoE lighting controller:

Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

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.

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.

Options and Accessories

Flangeless mud-in ring: Use **CA6SFT** 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. C6SDLWCCIEM6). Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

SBA: 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) or remodel (R) frames.

ENERGY STAR® exceptions

- 90 CRI configurations
- 347V & Emergency voltage/options
- Dali, EldoLED Solo & PoE drivers

Title 24 exceptions

- 1000lm configurations

Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with *LC suffix)

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.

C6SDL Calculite LED 6" gen 3

Square Downlight

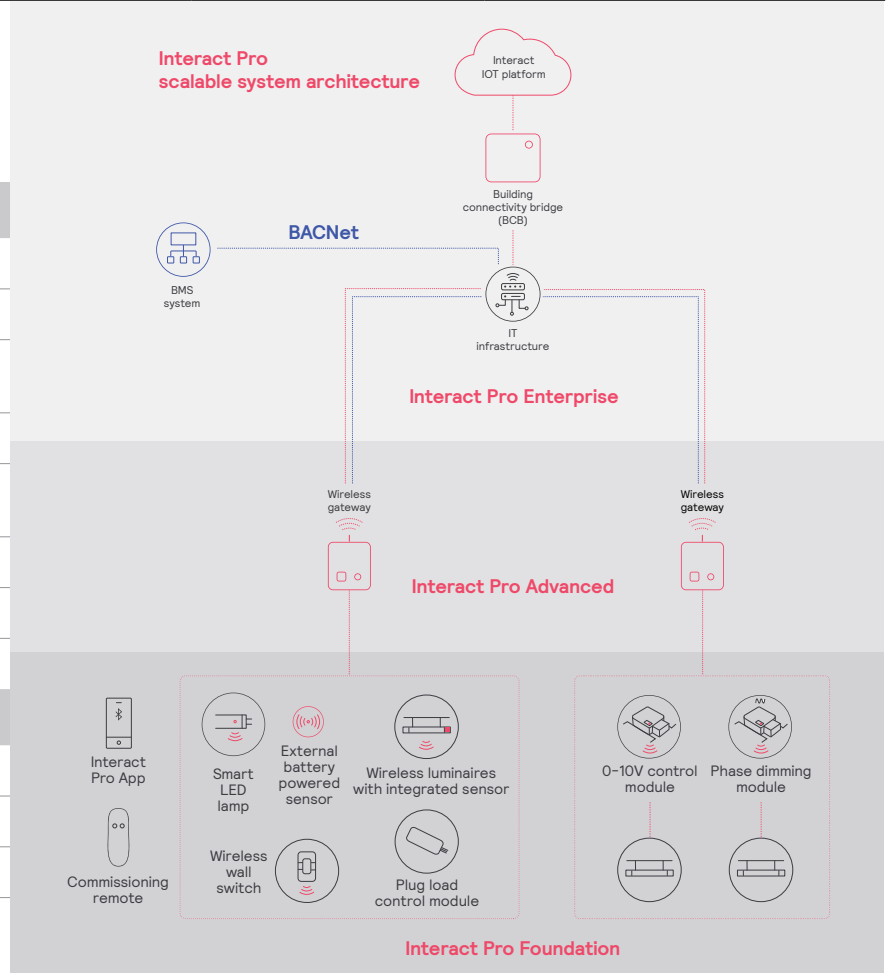
interact

	Interact Pro scalable system		
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

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
<ul style="list-style-type: none"> • luminaires with integrated sensors 	150
<ul style="list-style-type: none"> • smart TLEDS 	150
Total number of ZGP devices (sensors and switches)	50
<ul style="list-style-type: none"> • sensors 	30
<ul style="list-style-type: none"> • switches 	50
<ul style="list-style-type: none"> • zones and groups 	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



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Wireless Controls Options

Interact Pro scalable sensor (System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro 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 onsite to identify and group devices together.
- Compatible with:
 - SWS200 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
 - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
 - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem.

Interact Pro Enterprise (System Bridge Accessory with -SB option):

- 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 SENSOR IA 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.
- SB option in addition to occupancy and daylight 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: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Emergency Options (ER100) (System Bridge Accessory with -ER100 option):

- 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
- #### Radio only sensor (RA):
- Integral radio (RA) 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.
 - Integral RF device affixed to the driver box (see page 6 for details).
 - RA option available on light engines only.

Wired Controls Options

Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.

- Optional integral emergency controller and battery pack provides 600lm nominal output.
- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Interact Office Wired (PoE), Static White:

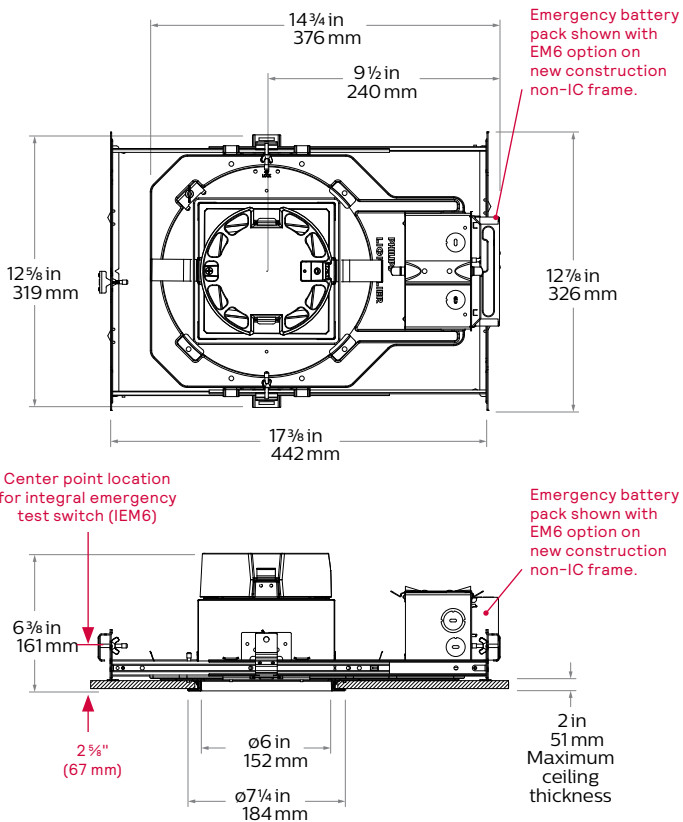
- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.

- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

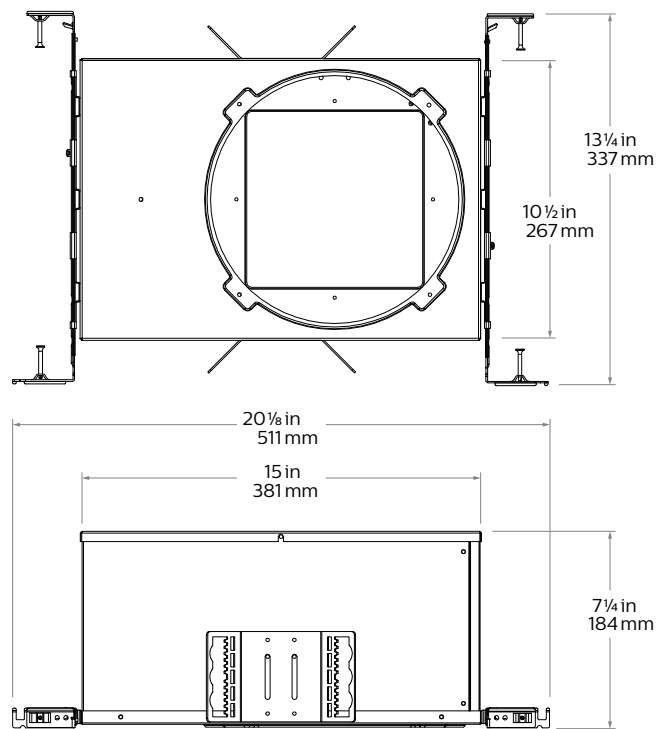
C6SDL Calculite LED 6" gen 3

Square Downlight

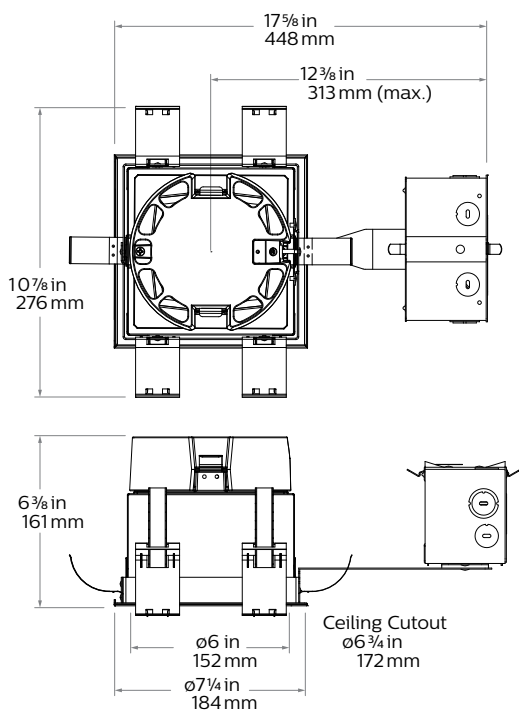
New Construction (N)



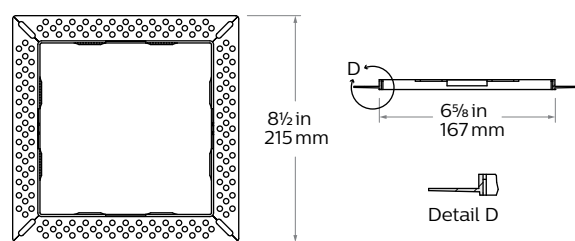
Chicago Plenum (LC)



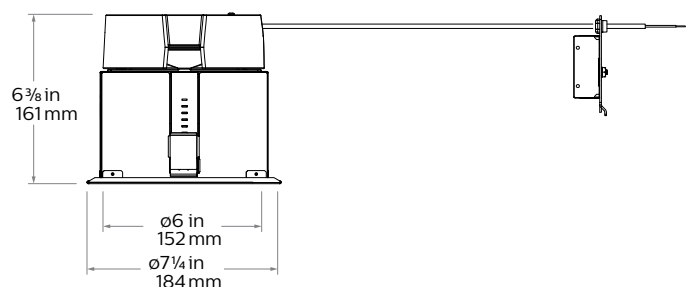
Remodeler (R)



Flangeless mud-in ring (CA6SFT) accessory



Retrofit (RH) with square trim

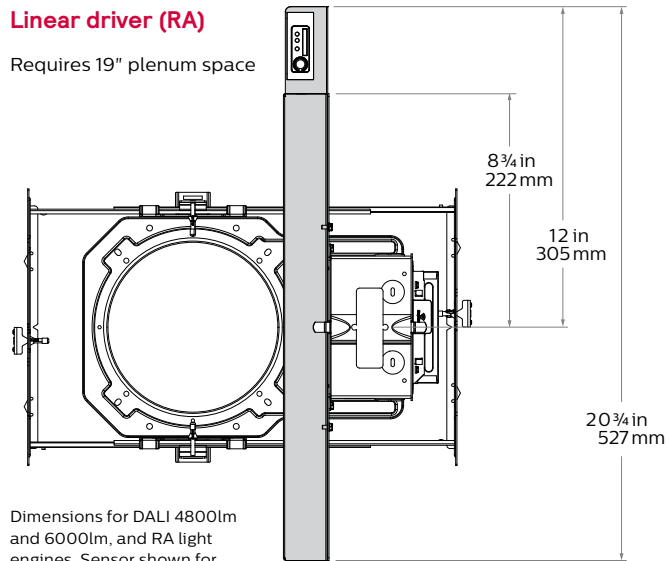


C6SDL Calculite LED 6" gen 3

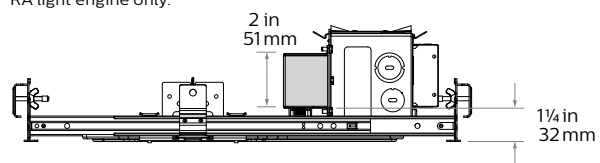
Square Downlight

Linear driver (RA)

Requires 19" plenum space



Dimensions for DALI 4800lm and 6000lm, and RA light engines. Sensor shown for RA light engine only.



C6SDL Calculite LED 6" gen 3

Square Downlight

Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
C6L10_NZ10U/3	120V	50/60Hz	0.08	230 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
C6L15_NZ10U/3	120V	50/60Hz	0.11	340 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
C6L20_NZ10U/3	120V	50/60Hz	0.16	460 mA	22W	16W	<10%	>0.95
	277V		0.08				<15%	>0.95
C6L25_NZ10U/3	120V	50/60Hz	0.20	590 mA	25W	21W	<10%	>0.95
	277V		0.10				<15%	>0.95
C6L35_NZ10U/3	120V	50/60Hz	0.30	900 mA	36W	30W	<10%	>0.95
	277V		0.14				<15%	>0.95
C6L48_NZ10U/3	120V	50/60Hz	0.42	1250 mA	51W	44W	<10%	>0.95
	277V		0.19				<15%	>0.95
C6L60_NZ10U/3	120V	50/60Hz	0.48	1400 mA	57W	50W	<10%	>0.95
	277V		0.21				<15%	>0.95

Medium/Wide

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
C6L10_MZ10U/3	120V	50/60Hz	0.08	210 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
C6L15_MZ10U/3	120V	50/60Hz	0.11	320 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
C6L20_MZ10U/3	120V	50/60Hz	0.15	430 mA	19W	15W	<10%	>0.95
	277V		0.07				<15%	>0.95
C6L25_MZ10U/3	120V	50/60Hz	0.19	550 mA	23W	19W	<10%	>0.95
	277V		0.09				<15%	>0.95
C6L35_MZ10U/3	120V	50/60Hz	0.25	570 mA	30W	25W	<10%	>0.95
	277V		0.11				<15%	>0.95
C6L48_MZ10U/3	120V	50/60Hz	0.36	810 mA	40W	34W	<10%	>0.95
	277V		0.16				<15%	>0.95
C6L60_MZ10U/3	120V	50/60Hz	0.50	1130 mA	57W	50W	<10%	>0.95
	277V		0.22				<15%	>0.95

Narrow (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C6L10__NPE	53V	51-54V	DC	160 mA	8.9 W
C6L15__NPE	53V	51-54V	DC	250 mA	13.7 W
C6L20__NPE	53V	51-54V	DC	330 mA	17.7 W
C6L25__NPE	53V	51-54V	DC	420 mA	22.8 W

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

Medium (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C6L10__MPE	53V	51-54V	DC	160 mA	8.4 W
C6L15__MPE	53V	51-54V	DC	230 mA	12.5 W
C6L20__MPE	53V	51-54V	DC	310 mA	16.7 W
C6L25__MPE	53V	51-54V	DC	390 mA	21.4 W

Wide (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C6L10__WPE	53V	51-54V	DC	160 mA	8.4 W
C6L15__WPE	53V	51-54V	DC	230 mA	12.5 W
C6L20__WPE	53V	51-54V	DC	310 mA	16.7 W
C6L25__WPE	53V	51-54V	DC	390 mA	21.4 W

Marked spacing applications

Light engine	4800lm	6000lm
C6L_Z10 series	X	X
C6L_L01 series	X	X
C6L_L1 series	X	X
C6L_LD series	X	X
C6L_LTE series	X	X
C6L_D series	X	X
C6L_DMx series	X	X
C6L_RA series	X	X

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.

Lifetime (TM-21 data)

Lumens	Narrow beam	Medium/Wide beam*
1000lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
1500lm		
2000lm		
2500lm		
3500lm*		
4800lm	L90 @ 60,000hrs.	L80 @ 60,000hrs.
6000lm		

* Lutron 3500lm with Medium/Wide beam is L85 @ 60,000hrs.

C6SDL Calculite LED 6" 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.



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



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).

Flanges



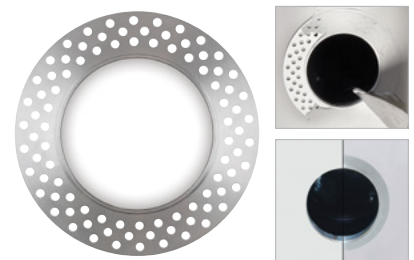
White (-): (matte) Provides the smoothest transition to ceilings when off.



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.



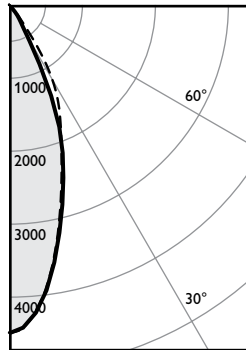
Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

C6SDL Calculite LED 6" gen 3

Square Downlight

Narrow beam, 2500lm Engine, 89.3 lm/w at 23.9W or 93.6 lm/W at 22.8W (Power over Ethernet)

Candela Curve



Frame: **C6SN or 6SN**
 Engine: **C6L25835NZ10U**
 Trim: **C6SDLNMCL**

CCT¹: 3500K
 Output lumens: 2133 lms
 Input watts: 23.9 W (± 5%)
 CRI: 80 min
 Spacing Crit.: 0.6
 Beam Angle: 37°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1802	84.5%
0-40	2053	96.3%
0-60	2132	99.9%
0-90	2133	100.0%

Angle	0°	45°	Lms
0	4487	4487	
5	4220	4210	380
10	3570	3525	
15	2822	2741	764
20	2148	2098	
25	1366	1643	658
30	559	1189	
35	284	570	251
40	175	209	
45	80	103	72
50	15	39	
55	2	8	6
60	1	1	
65	1	1	1
70	1	1	
75	1	0	0
80	0	0	
85	1	1	1
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	179	3.0'
6'	125	3.6'
7'	92	4.2'
8'	70	4.8'
9'	55	5.4'

* 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'	98.9	1.06
6'	64.9	0.70
7'	46.3	0.50
8'	38.6	0.41
9'	30.9	0.33

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

Efficacy: 89.3 lm/w
 Report#: F37156

Adjustment factors

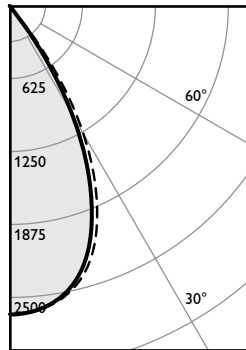
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 103%	6000lm = 202%
CCL = 95%	80CRI 3500K = 100%	4800lm = 192%
CCD = 87%	80CRI 3000K = 95%	3500lm = 140%
CCZ = 63%	80CRI 2700K = 93%	2500lm = 100%
WH = 87%	90CRI 3000K = 83%	2000lm = 80%
BK = 57%	90CRI 2700K = 78%	1500lm = 60%
		1000lm = 40%

Coefficients of utilization

Ceiling	80%		70%		50%		30%		0%			
	70	50	30	10	50	10	50	10	50	10		
Wall	70	50	30	10	50	10	50	10	50	10		
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	114	112	109	107	110	106	106	102	102	99	99	95
2	109	105	101	98	103	97	100	95	97	93	90	85
3	105	99	95	91	98	90	95	89	93	88	85	80
4	100	94	89	85	93	85	90	84	89	83	80	76
5	96	89	84	80	88	80	86	79	85	78	76	72
6	92	84	79	75	84	75	82	75	81	74	72	69
7	88	80	75	71	80	71	78	71	77	70	69	66
8	85	76	71	68	76	68	75	67	74	67	66	63
9	81	73	68	64	73	64	72	64	71	64	63	60
10	78	70	65	61	69	61	69	61	68	61	60	56

Medium beam, 2500lm Engine, 101.6 lm/w at 21.3W or 101.1 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C6SN or 6SN**
 Engine: **C6L25835MZ10U**
 Trim: **C6SDLNMCL**

CCT¹: 3500K
 Output lumens: 2164 lms
 Input watts: 21.3 W (± 5%)
 CRI: 80 min
 Spacing Crit.: 0.9
 Beam Angle: 55°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1647	76.1%
0-40	2058	95.1%
0-60	2162	99.9%
0-90	2164	100.0%

Angle	0°	45°	Lms
0	2647	2647	
5	2624	2620	247
10	2539	2530	
15	2382	2348	654
20	2088	2101	
25	1615	1730	745
30	1058	1222	
35	563	723	411
40	249	326	
45	88	133	97
50	16	43	
55	3	9	7
60	2	1	
65	1	1	1
70	1	1	
75	1	0	1
80	1	0	
85	1	1	1
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	106	4.5'
6'	74	5.4'
7'	54	6.3'
8'	41	7.2'
9'	33	8.1'

* 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'	99.1	0.94
6'	65.0	0.62
7'	46.5	0.44
8'	38.7	0.37
9'	31.0	0.30

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

Efficacy: 101.6 lm/w
 Report#: F37167

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 240%
CCL = 95%	80CRI 3500K = 100%	4800lm = 192%
CCD = 87%	80CRI 3000K = 97%	3500lm = 140%
CCZ = 63%	80CRI 2700K = 87%	2500lm = 100%
WH = 87%	90CRI 3000K = 77%	2000lm = 80%
BK = 57%	90CRI 2700K = 73%	1500lm = 60%
		1000lm = 40%

Coefficients of utilization

Ceiling	80%		70%		50%		30%		0%		
	70	50	30	10	50	10	50	10	50	10	
Wall	70	50	30	10	50	10	50	10	50	10	
RCR	Zonal cavity method - Effective floor reflectance = 20%										
Room Cavity Ratio	0	119	119	119	116	116	111	111	106	106	100
1	114	111	109	107	109	105	105	102	101	99	94
2	108	104	100	97	102	96	99	93	96	91	88
3	103	97	92	89	96	88	93	86	91	85	82
4	98	91	86	82	90	81	88	80	86	79	77
5	94	86	80	76	85	75	83	75	81	74	72
6	89	81	75	71	80	70	78	70	77	69	68
7	85	76	70	66	75	66	74	66	73	65	64
8	81	72	66	62	71	62	70	62	69	61	60
9	77	68	62	58	67	58	66	58	66	58	56
10	74	64	59	55	64	55	63	55	62	55	53

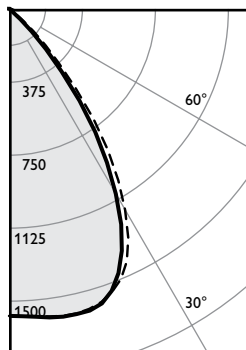
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C6SDL Calculite LED 6" gen 3

Square Downlight

Wide beam, 2500lm Engine, 90.0 lm/w at 21.3W or 89.6 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C6SN or 6SN**
 Engine: **C6L25835MZ10U**
 Trim: **C6SDLWCL**

CCT¹: 3500K
 Output lumens: 1917 lms
 Input watts: 21.3 W (±5%)
 CRI: 80 min
 Spacing Crit.: 1.1
 Beam Angle: 68°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1225	63.9%
0-40	1726	90.1%
0-60	1914	99.9%
0-90	1917	100.0%

Angle	0°	45°	Lms
0	1573	1573	
5	1584	1581	151
10	1602	1603	
15	1601	1592	447
20	1538	1544	
25	1368	1428	627
30	1095	1190	
35	771	883	502
40	419	531	
45	165	266	176
50	23	96	
55	4	15	12
60	2	2	
65	1	1	1
70	1	1	
75	1	1	1
80	1	0	
85	1	1	1
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	63	5.5'
6'	44	6.6'
7'	32	7.7'
8'	25	8.8'
9'	19	9.9'

* 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'	86.6	0.94
6'	56.8	0.62
7'	40.6	0.44
8'	33.8	0.37
9'	27.1	0.30

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

Efficacy: 90.0 lm/w
 Report#: F37139

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 240%
CCL = 95%	80CRI 3500K = 100%	4800lm = 192%
CCD = 87%	80CRI 3000K = 97%	3500lm = 140%
CCZ = 63%	80CRI 2700K = 87%	2500lm = 100%
WH = 87%	90CRI 3000K = 77%	2000lm = 80%
BK = 57%	90CRI 2700K = 73%	1500lm = 60%
		1000lm = 40%

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	50	10
Wall																				
RCR	Zonal cavity method - Effective floor reflectance = 20%																			
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	106	106	100	98	93	86	86	79
1	113	110	108	106	108	104	104	104	101	100	98	93	86	86	79	73	68	63	58	54
2	107	102	98	95	101	94	97	91	94	89	86	82	79	73	68	63	58	54	50	47
3	102	95	90	86	93	85	91	83	88	82	79	73	68	63	58	54	50	47	44	41
4	96	88	82	78	87	77	85	77	83	76	73	68	63	58	54	50	47	44	41	38
5	91	82	76	71	81	71	79	70	78	70	68	63	58	54	50	47	44	41	38	35
6	86	76	70	66	76	65	74	65	73	65	63	58	54	50	47	44	41	38	35	32
7	81	71	65	61	71	60	69	60	68	60	58	54	50	47	44	41	38	35	32	29
8	77	67	61	56	66	56	65	56	64	56	54	50	47	44	41	38	35	32	29	26
9	73	63	56	52	62	52	61	52	60	52	50	47	44	41	38	35	32	29	26	23
10	69	59	53	49	58	49	58	49	57	48	47	44	41	38	35	32	29	26	23	20

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI 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.



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Signify North America Corporation
 400 Crossing Blvd, Suite 600
 Bridgewater, NJ 08807
 Telephone: 855-486-2216

Signify Canada Ltd.
 281 Hillmount Road,
 Markham, ON, Canada L6C 2S3
 Telephone: 800-668-9008

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