

LIGHTOLIER

by @signify

Downlighting

Calculite LED 6" gen 3

C6SDL Square Downlight



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 BAC Chicago Plenum ² 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

Series	Lumens	CRI/CCT	Beam ⁵	Dimming	Options	Voltage	Options
C6L							
C6L Calculite LED 6" gen 3	10 1000lm	927 90CRI/2700K	N Narrow (37°) ⁴ M Medium (56°) & Wide (65°) ⁴	Z10 0-10V 1%	— None D2O Dim to Off	U 120/277V 3 347V ⁸ (Z10 only)	RH Retrofit for square* * Retrofits select legacy luminaires (E & Z10 dimming only pages 2 & 7) BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
	15 1500lm	930 90CRI/3000K		L01 Lutron PEQ0 EcoSystem 0.1% (up to 2000lm)		U 120/277V	
	20 2000lm	935 90CRI/3500K		L1 Lutron LDE1 EcoSystem (up to 3500lm)			
	25 2500lm	940 90CRI/4000K		RA Integral Interact Pro RF sensor ⁶ (enables wireless connected lighting control)			
	30 3000lm	950 90CRI/5000K ³		D DALI 0.1% ⁷	— None LIN Linear	U 120/277V	
	35 3500lm	D2W 90CRI/3000K to 1800K ⁴ (dim-to-warm)		SOL EldoLED Solo 0-10V 0.1%	— None LIN Linear	U 120/277V	
	48 4800lm*			DMX Digital Multiplexing w/RDM 0.1%	SQR Square		
	60 6000lm*			E Forward & Reverse Phase (up to 3000lm)		1 120V	
				LTE Lutron LTE Hi-Lume Phase Cut 1% (up to 3500lm)			
				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 ⁵	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)	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)	P Polished (matches aperture) F Flangeless (requires CA6SFT) — White (matches finish) F Flangeless (requires CA6SFT)	

Beam options

Trim	Nar. engine	Med. engine
Nar. & Med.	37° (0.6 s.c.)	56° (0.9 s.c.)
Wide	Not recommended	65° (1.1 s.c.)

Accessories

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

SBA	Interact Ready System Bridge Accessory (refer to Philips System Bridge Accessory spec sheet for options/details)
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)
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.
- Consult factory for 5000K CCT (50) with narrow (N) beam.
- Dim-to-warm (D2W) available only with Z10 dimming. Narrow (N) and medium (M) beams only.
- See beam options table for light engine and trim combination spacing criterion.
- Linear driver profile (see page 8).
- DALI 4800lm and 6000lm, and all RA options require linear driver configuration (see page 8).
- Not available for 4800lm (48) & 6000lm (60). Order T347-75VA field installed transformer.

** 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.



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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 D2O 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)
- Dim to Warm (D2W): option changes CCT from 3000-1800K gradually as it dims. Use with Z10 dimming only. Fixture-to-fixture consistency of ≤ 3 SDCM at 2700K & 3000K, and ≤ 5 SDCM at 1800K.

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.

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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_a up to 94 CRI • R_f up to 92 TM-30
 R_g up to 67 CRI $R_{f,h1}$ up to 91 TM-30
 G_a up to 99 CRI R_g up to 100 TM-30
 C_g 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

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_f	R_g	$R_{cs,h1}$	
1000 lm	Narrow (N)	853	99	36°	2510	90+	50+	91	100	-5%	0
	Medium (M)	896	103	55°	1183	90+	50+	91	100	-5%	0
	Wide (W)	710	81	72°	641	90+	50+	91	100	-5%	0
1500 lm	Narrow (N)	1313	103	36°	3863	90+	50+	91	100	-5%	1
	Medium (M)	1355	104	55°	1790	90+	50+	91	100	-5%	1
	Wide (W)	1070	82	72°	965	90+	50+	91	100	-5%	0
2000 lm	Narrow (N)	1790	103	36°	5265	90+	50+	91	100	-5%	2
	Medium (M)	1834	103	55°	2422	90+	50+	91	100	-5%	2
	Wide (W)	1444	81	72°	1304	90+	50+	91	100	-5%	1
2500 lm	Narrow (N)	2166	101	36°	6372	90+	50+	91	100	-5%	3
	Medium (M)	2238	104	55°	2954	90+	50+	91	100	-5%	3
	Wide (W)	1791	84	72°	1616	90+	50+	91	100	-5%	2
3000 lm	Narrow (N)	2525	99	36°	7428	90+	50+	91	100	-5%	3
	Medium (M)	2703	102	55°	3568	90+	50+	91	100	-5%	4
	Wide (W)	2134	81	72°	1926	90+	50+	91	100	-5%	3
3500 lm	Narrow (N)	2875	101	36°	8457	90+	50+	91	100	-5%	4
	Medium (M)	3025	103	55°	3993	90+	50+	91	100	-5%	4
	Wide (W)	2369	81	72°	2138	90+	50+	91	100	-5%	3
4800 lm	Narrow (N)	3874	96	36°	11397	90+	50+	91	100	-5%	5
	Medium (M)	4318	103	55°	5701	90+	50+	91	100	-5%	5
	Wide (W)	3389	81	72°	3059	90+	50+	91	100	-5%	4
6000 lm	Narrow (N)	4769	90	36°	14031	90+	50+	91	100	-5%	6
	Medium (M)	5395	99	55°	7123	90+	50+	91	100	-5%	6
	Wide (W)	4239	78	72°	3825	90+	50+	91	100	-5%	5

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interact

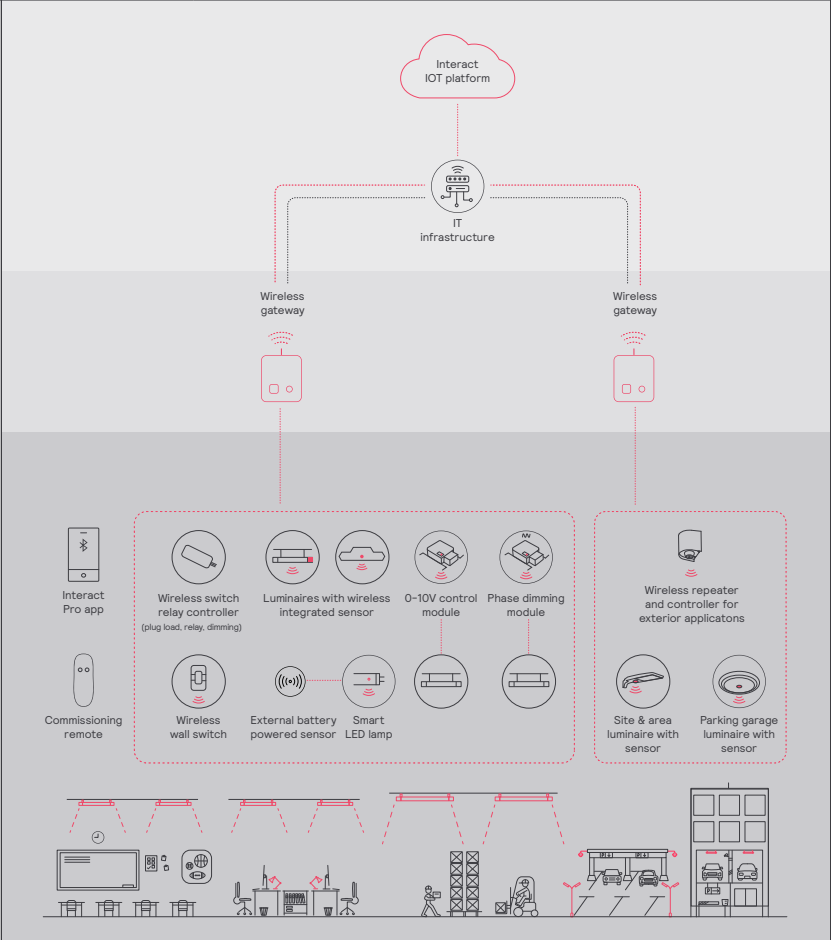
			
	Standalone	Gateway Connected	
		Option 1	Option 2
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Correlated color temperature (CCT) tuning by switch	New	✓	✓
Support for sensor-based Tunable White luminaires	New	✓	✓
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
• 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



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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 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.
- 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.

Wired controls options

Interact (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Test switch and indicator light mounted on side of chassis on one end.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- 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.
- PoE lighting controller is accessible from below.
- 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: interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

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	-	-

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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



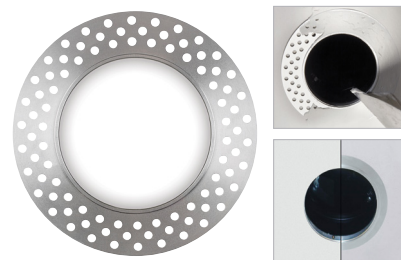
White (-): (matte) Provides the smoothest transition to ceilings when off.



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.

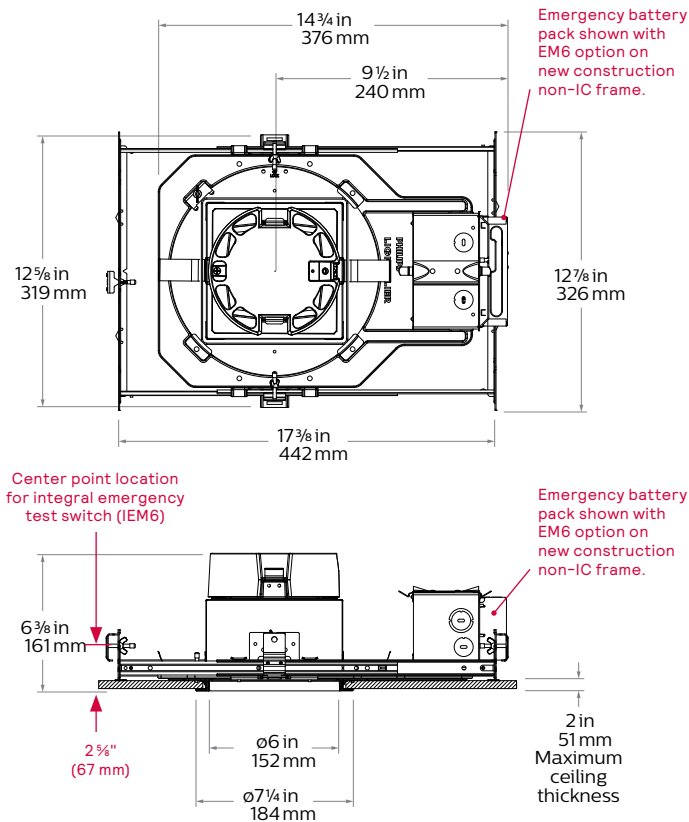


Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

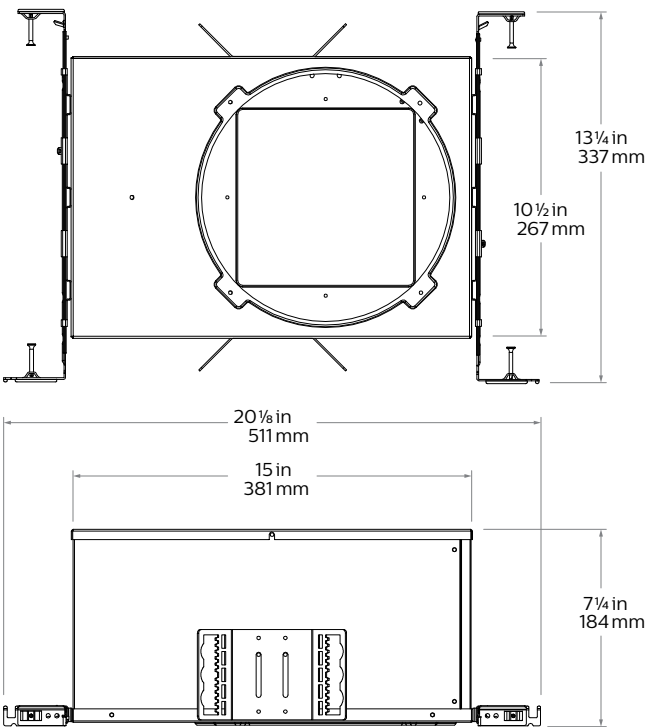
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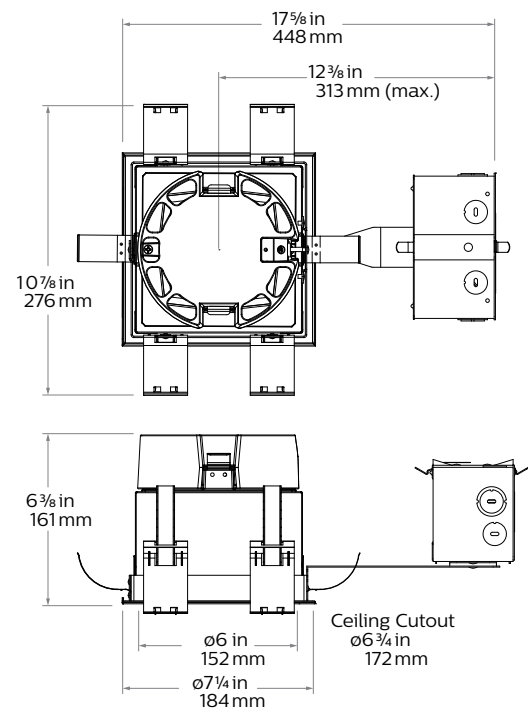
New Construction (N)



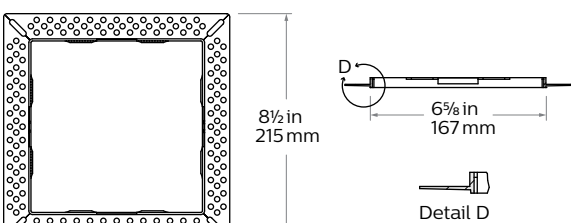
Chicago Plenum (LC)



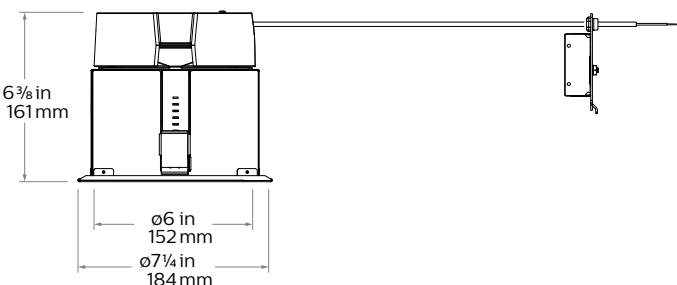
Remodeler (R)



Flangeless mud-in ring (CA6SFT) accessory



Retrofit (RH) with square trim

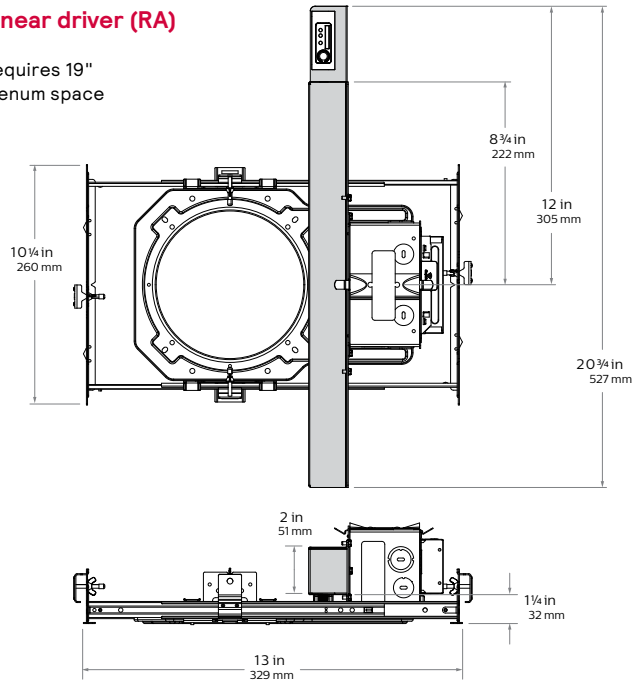


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Linear driver (RA)

Requires 19"
plenum space



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

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Electrical - Narrow

Light engine	Input Volts	Input Freq.	Input Current	Drive Current	Input Power	LED Power	THD Factor @ Max Load	Power Factor
1000lm	120V	50/60Hz	0.072A	0.22A	8.6W	7.0W	<10%	>0.9
	277V	50/60Hz	0.032A	0.22A	8.8W	7.0W	<20%	>0.9
	347V	50/60Hz	0.029A	0.22A	10.0W	7.0W	<30%	>0.9
1500lm	120V	50/60Hz	0.107A	0.33A	12.8W	10.7W	<10%	>0.9
	277V	50/60Hz	0.046A	0.33A	12.9W	10.7W	<10%	>0.9
	347V	50/60Hz	0.042A	0.33A	14.6W	10.7W	<25%	>0.9
2000lm	120V	50/60Hz	0.145A	0.45A	17.4W	14.7W	<10%	>0.9
	277V	50/60Hz	0.063A	0.45A	17.5W	14.7W	<10%	>0.9
	347V	50/60Hz	0.056A	0.45A	19.4W	14.7W	<20%	>0.9
2500lm	120V	50/60Hz	0.178A	0.55A	21.4W	18.2W	<10%	>0.9
	277V	50/60Hz	0.078A	0.55A	21.5W	18.2W	<10%	>0.9
	347V	50/60Hz	0.065A	0.55A	22.7W	18.2W	<20%	>0.9
3000lm	120V	50/60Hz	0.212A	0.65A	25.5W	21.7W	<10%	>0.9
	277V	50/60Hz	0.091A	0.65A	25.3W	21.7W	<10%	>0.9
	347V	50/60Hz	0.077A	0.65A	26.7W	21.7W	<15%	>0.9
3500lm	120V	50/60Hz	0.237A	0.75A	28.4W	24.4W	<10%	>0.9
	277V	50/60Hz	0.103A	0.75A	28.4W	24.4W	<10%	>0.9
	347V	50/60Hz	0.084A	0.75A	29.1W	24.4W	<15%	>0.9
4800lm	120V	50/60Hz	0.338A	1.05A	40.5W	34.9W	<10%	>0.9
	277V	50/60Hz	0.145A	1.05A	40.3W	34.9W	<10%	>0.9
	347V	50/60Hz	0.118A	1.05A	41.0W	34.9W	<10%	>0.9
6000lm	120V	50/60Hz	0.442A	1.35A	53.0W	45.6W	<10%	>0.9
	277V	50/60Hz	0.188A	1.35A	52.1W	45.6W	<10%	>0.9
	347V	50/60Hz	0.153A	1.35A	53.0W	45.6W	<10%	>0.9

Electrical - Medium & Wide

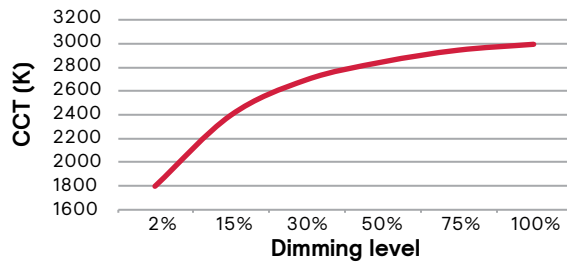
Light engine	Input Volts	Input Freq.	Input Current	Drive Current	Input Power	LED Power	THD Factor @ Max Load	Power Factor
1000lm	120V	50/60Hz	0.073A	0.22A	8.7W	7.1W	<10%	>0.9
	277V	50/60Hz	0.032A	0.22A	8.9W	7.1W	<20%	>0.9
	347V	50/60Hz	0.029A	0.22A	10.2W	7.1W	<30%	>0.9
1500lm	120V	50/60Hz	0.109A	0.33A	13.0W	10.9W	<10%	>0.9
	277V	50/60Hz	0.047A	0.33A	13.1W	10.9W	<10%	>0.9
	347V	50/60Hz	0.043A	0.33A	14.9W	10.9W	<25%	>0.9
2000lm	120V	50/60Hz	0.149A	0.45A	17.8W	15.1W	<10%	>0.9
	277V	50/60Hz	0.065A	0.45A	18.0W	15.1W	<10%	>0.9
	347V	50/60Hz	0.057A	0.45A	19.8W	15.1W	<20%	>0.9
2500lm	120V	50/60Hz	0.179A	0.55A	21.4W	18.2W	<10%	>0.9
	277V	50/60Hz	0.078A	0.55A	21.6W	18.2W	<10%	>0.9
	347V	50/60Hz	0.066A	0.55A	22.8W	18.2W	<20%	>0.9
3000lm	120V	50/60Hz	0.220A	0.67A	26.4W	22.4W	<10%	>0.9
	277V	50/60Hz	0.095A	0.67A	26.2W	22.4W	<10%	>0.9
	347V	50/60Hz	0.079A	0.67A	27.5W	22.4W	<15%	>0.9
3500lm	120V	50/60Hz	0.245A	0.75A	29.4W	25.3W	<10%	>0.9
	277V	50/60Hz	0.106A	0.75A	29.4W	25.3W	<10%	>0.9
	347V	50/60Hz	0.087A	0.75A	30.1W	25.3W	<15%	>0.9
4800lm	120V	50/60Hz	0.350A	1.08A	42.0W	36.1W	<10%	>0.9
	277V	50/60Hz	0.150A	1.08A	41.5W	36.1W	<10%	>0.9
	347V	50/60Hz	0.122A	1.08A	42.5W	36.1W	<10%	>0.9
6000lm	120V	50/60Hz	0.454A	1.38A	54.5W	46.8W	<10%	>0.9
	277V	50/60Hz	0.193A	1.38A	53.5W	46.8W	<10%	>0.9
	347V	50/60Hz	0.157A	1.38A	54.5W	46.8W	<10%	>0.9

Lifetime (TM-21) data

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

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

Dim-to-Warm: CCT vs Dimmed level



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	3120 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

Light engine	4800lm	6000lm
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)

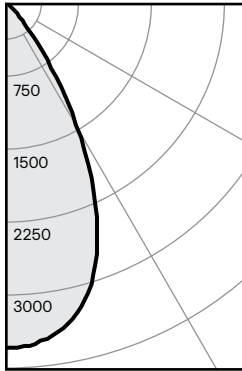
In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

C6SDL Calculite LED 6" gen 3

Square Downlight

Narrow beam, 2500lm Engine, 101lm/W at 22W

Candela Curve



6SN / C6L25935NZ10U /
C6RDLCL

Output lumens: 2167 lms
Input watts: 21.5 W
CRI: 90 min
CCT¹: 3500K
Spacing Crit.: 0.58
Beam Angle: 36°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1840	84.9%
0-40	2093	96.6%
0-60	2166	100.0%
0-90	2167	100.0%

Angle	Mean CP	Lumens
0	4767	
5	4513	
10	3744	406
15	2838	
20	2103	788
25	1439	
30	782	646
35	381	
40	184	253
45	83	
50	23	68
55	3	
60	1	5
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)*
8'	102	4.8'
9'	80	5.4'
10'	65	6.0'
12'	45	6.6'
14'	24	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'	101.0	0.95
6'	66.0	0.63
7'	47.0	0.45
8'	39.0	0.37
9'	32.0	0.30

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

Efficacy: 100.8lm/W
Report²: STMR-2975

Adjustment factors

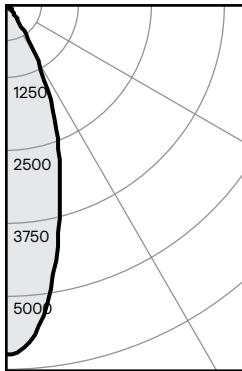
Finish	CCT	Lumens
CL = 100%	90CRI, 4000K = 102%	6000lm = 240%
CC = 95%	90CRI, 3500K = 100%	4800lm = 192%
CD = 87%	90CRI, 3000K = 96%	3500lm = 140%
CZ = 63%	90CRI, 2700K = 92%	3000lm = 120%
WH = 87%		2500lm = 100%
BK = 57%		2000lm = 80%
		1500lm = 60%
		1000lm = 40%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
Wall	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
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	95	100
1	114	112	110	108	110	106	106	103	103	102	100	95	102	100	95	93	90
2	109	105	102	99	103	98	100	95	97	93	88	85	93	88	85	81	77
3	105	99	95	91	98	91	95	89	93	88	85	81	89	83	81	73	69
4	101	94	89	86	93	85	91	84	89	83	77	73	85	79	77	66	63
5	96	89	84	80	88	80	87	79	85	79	73	69	81	75	73	61	58
6	92	85	80	76	84	76	83	75	81	75	73	69	77	71	69	58	55
7	89	81	76	72	80	72	79	71	78	71	69	66	75	68	66	55	52
8	85	77	72	68	77	68	75	68	75	68	66	63	71	65	63	52	50
9	82	74	69	65	73	65	72	65	71	65	63	60	69	62	60	50	48
10	79	71	66	62	70	62	69	62	69	62	60	57	67	60	57	48	46

Medium beam, 2500lm Engine, 104lm/W at 22W

Candela Curve



6SN / C6L25935MZ10U /
C6SDLNMCL

Output lumens: 2238 lms
Input watts: 21.5 W
CRI: 90 min
CCT¹: 3500K
Spacing Crit.: 0.88
Beam Angle: 55°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1724	77.0%
0-40	2138	95.5%
0-60	2237	100.0%
0-90	2238	100.0%

Angle	Mean CP	Lumens
0	2819	
5	2790	
10	2696	263
15	2507	
20	2174	696
25	1695	
30	1152	765
35	652	
40	293	414
45	106	
50	26	93
55	4	
60	1	6
65	1	
70	1	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'	113	4.4'
6'	78	5.3'
7'	58	6.2'
8'	44	7.0'
9'	35	7.9'

* 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'	103.0	0.95
6'	68.0	0.63
7'	48.0	0.45
8'	40.0	0.37
9'	32.0	0.30

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

Efficacy: 104.1lm/W
Report²: STMR-2440

Adjustment factors

Finish	CCT	Lumens
CL = 100%	90CRI, 4000K = 102%	6000lm = 240%
CC = 95%	90CRI, 3500K = 100%	4800lm = 192%
CD = 87%	90CRI, 3000K = 96%	3500lm = 140%
CZ = 63%	90CRI, 2700K = 92%	3000lm = 120%
WH = 87%		2500lm = 100%
BK = 57%		2000lm = 80%
		1500lm = 60%
		1000lm = 40%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
Wall	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
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	95	100
1	114	112	110	108	110	106	106	103	103	102	100	95	102	100	95	93	90
2	109	105	102	99	103	98	100	95	97	93	88	85	93	88	85	81	77
3	105	99	95	91	98	91	95	89	93	88	85	81	89	83	81	73	69
4	101	94	89	86	93	85	91	84	89	83	77	73	85	79	77	66	63
5	96	89	84	80	88	80	87	79	85	79	73	69	81	75	73	61	58
6	92	85	80	76	84	76	83	75	81	75	73	69	77	71	69	58	55
7	89	81	76	72	80	72	79	71	78	71	69	66	75	68	66	55	52
8	85	77	72	68	77	68	75	68	75	68	66	63	71	65	63	52	50
9	82	74	69	65	73	65	72	65	71	65	63	60	69	62	60	50	48
10	79	71	66	62	70	62	69	62	69	62	60	57	67	60	57	48	46

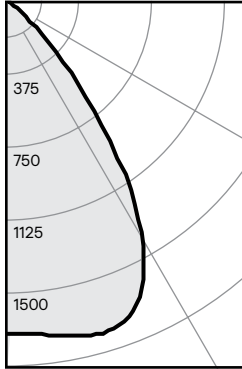
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C6SDL Calculite LED 6" gen 3

Square Downlight

Wide beam, 2500lm Engine, 84lm/W at 21W

Candela Curve



6SN / C6L25935MZ10U /
C6SDLWCL

Output lumens: 1791 lms
Input watts: 21.4 W
CRI: 90 min
CCT¹: 3500K
Spacing Crit.: 1.2
Beam Angle: 72°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1125	62.8%
0-40	1610	89.9%
0-60	1789	99.9%
0-90	1791	100.0%

Angle	Mean CP	Lumens
0	1368	
5	1378	
10	1400	132
15	1421	
20	1404	401
25	1305	
30	1103	592
35	793	
40	454	485
45	202	
50	53	166
55	8	
60	2	13
65	1	
70	1	1
75	1	
80	0	1
85	0	
90	0	0

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	55	6.0'
6'	38	7.2'
7'	28	8.4'
8'	21	9.6'
9'	17	10.8'

* 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'	81.0	0.95
6'	53.0	0.62
7'	38.0	0.44
8'	32.0	0.37
9'	25.0	0.30

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

Efficacy: 83.7lm/W
Report²: STMR-2441

Adjustment factors

Finish	CCT	Lumens
CL = 100%	90CRI, 4000K = 102%	6000lm = 240%
CC = 95%	90CRI, 3500K = 100%	4800lm = 192%
CD = 87%	90CRI, 3000K = 96%	3500lm = 140%
CZ = 63%	90CRI, 2700K = 92%	3000lm = 120%
WH = 87%		2500lm = 100%
BK = 57%		2000lm = 80%
		1500lm = 60%
		1000lm = 40%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
Wall	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
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
1	113	110	108	105	108	104	104	104	101	100	98	93	94	89	86	82	79
2	107	102	98	94	100	93	97	91	94	88	82	75	73	69	67	62	57
3	101	95	89	85	93	85	91	83	88	82	75	73	69	67	62	57	53
4	96	88	82	78	87	77	84	76	82	75	73	69	67	62	57	53	50
5	91	82	75	71	81	71	79	70	77	69	67	62	57	53	50	46	46
6	85	76	70	65	75	65	74	64	72	64	62	57	53	50	46	46	46
7	81	71	65	60	70	60	69	60	68	59	57	53	50	46	46	46	46
8	76	66	60	56	66	55	65	55	64	55	53	50	46	46	46	46	46
9	72	62	56	52	62	52	61	51	60	51	50	46	46	46	46	46	46
10	69	58	52	48	58	48	57	48	56	48	46	46	46	46	46	46	46

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.



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