LIGHTOLIER
by signify

Downlighting

Calculite LED 4" gen 3

C4SA Square AirSeal IC frame

Calculite LED 4" 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.

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

Complete luminaire = Frame + Engine + Trim + Accessories (optional)

Frame

example: 4SA

Series	Aperture	Installation
4	**S**	**A**
4 4" New Construction	**S** Square	**A** AirSeal IC 120/277/347V[1]

Engine

example: C4L15835NZ10U

Series	Lumens	CRI	CCT	Beam[2]	Dimming	Options	Voltage
C4L							
C4L Calculite LED 4" gen 3	**05** 500lm **10** 1000lm **15** 1500lm **20** 2000lm	**8** 80CRI **9** 90CRI	**27** 2700K **30** 3000K **35** 3500K **40** 4000K	**N** Narrow (43°) **M** Medium (56°) **W** Wide (76°)[2]	**Z10** 0-10V 1%	**——** None **D2O** Dim to Off	**U** 120/277V **3** 347V (Z10 only)
					L01 Lutron PEQ0 EcoSystem 0.1% **L1** Lutron LDE1 EcoSystem (500lm not available)		**U** 120/277V
					D DALI 0.1%	**——** None **LIN** Linear	**U** 120/277V
					SOL EldoLED Solo 0-10V 0.1% **DMX** Digital Multiplexing w/RDM 0.1%	**——** None **LIN** Linear **SQR** Square	**U** 120/277V
					E Forward & Reverse Phase **LTE** Lutron LTE Hi-Lume Phase Cut 1% (500lm not avail.)		**1** 120V

Trim

example: C4SDLNMCCP

Series	Aperture	Style	Beam[2]	Finish	Flange
C4	**S**				
C4L Calculite LED 4" gen 3	**S** Square	**DL** Downlight	**NM** Narrow & Medium **W** Wide	**CL** Specular clear **CC** Comfort clear **CD** Comfort clear diffuse	**–** White (matte) **P** Polished (matches aperture) **F** Flangeless (requires CA4SFT)
		LW Lensed Wall Wash[3]	**–** blank	**WH** White (matte)	**–** White (matches finish) **F** Flangeless

Beam options

Trim	Narrow engine	Medium engine
Narrow/ Medium	47° (0.7 s.c.)	63° (0.9 s.c.)
Wide	Not recommended	79° (1.2 s.c.)

Accessories

SBA	Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SBA spec sheet)[4]
CA4SFT	Mud-in ring for use with flangeless installations (ordered with a flangeless trim)

1. Universal 120-347V for 0-10v (Z10) dimming only. Non-Z10 dimming options available for 120/277V only.
2. See Beam Options table to the left for light engine and trim combination spacing criterion.
3. Medium (M) beam is ideal for Lensed Wall Wash (LW) applications.
4. Requires IRT9015 IR remote & Interact Pro App for commissioning.

WET LOCATION · IC INSULATION CONTACT · cULus LISTED · RoHS COMPLIANT · ENERGY STAR · mesoOptics · interact ready.

C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

Frame-in-kits

AirSeal:

Galvanized steel housing for dry or plaster ceilings. Pre-installed telescoping mounting bars from 13" to 24".

Patented install Mounting frame:

With no driver attached, this versatile frame is independent of driver accommodating a wide range of lumen packages, driver types and CCTs, including 120V and 277V inputs.

Close-cut aperture design eliminates possibility of gap between ceiling opening & 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 eliminates need for wiring between frame and LED driver, and also saves time during installation and future replacements/upgrades. Plug-and-play receptacle accommodates technology upgrade of light engines and replacements for the life of the building.

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 (L01) Hi-Lume Premier EcoSystem 0.1%
- Lutron LDE1 (L1) 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%
- Dim to Warm (D2W) - option changes CCT from 3000 - 1800K gradually as it dims, dimming agnostic

Dimming options:

- The following are factory-set for the SOL, D, and DMX driver options (ex. DMXLIN):
- SOL/D/DMX: Logarithmic (-) standard
- SOL/D/DMX: Linear (LIN)
- SOL/DMX: Square (SQR)

Optical systems

Comfort throughout the space:
Patented optical system combines primary and secondary optics to provide a true 50° physical cutoff and 45° reflected cutoff virtually eliminating the view of the light source and bright spots in the reflector. A new reflector curve reduces reflector brightness by up to 50% compared to existing products, allowing for the use of higher lumen packages in smaller apertures without creating bright spots in the ceiling.

MesoOptics PET optical diffusion film:
provides a smooth beam shape and mitigates color over angle with optimized luminaire efficiency.

Quality of light:
2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime. Proprietary optical grade silicone lens with patterned surface provides soft, even beam diffusion without hotspots or dark rings.

Light Engine

Quick connect power pack comprised of light source and driver 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 0-10v dimming only and include dedicated 347V driver for use with universal 120/277/347V (U) frames. All other dimming options available only for 120/277V input.

Options and Accessories

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

SBA: Interact Ready System Bridge Accessory. Requires IRT9015 IR remote and Interact Pro App for commissioning. Specify with integral occupancy and daylight sensing capabilities for controls and compatibility with Interact Pro.

ENERGY STAR® exceptions

- 500 lm, 90 CRI & Lensed Wall Wash configs
- Dali, ELV & EldoLED Solo drivers

Title 24 exceptions

- 1000 lm in Downlight & Lensed Wall Wash configurations

Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified

Warranty

5 year limited warranty

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

C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

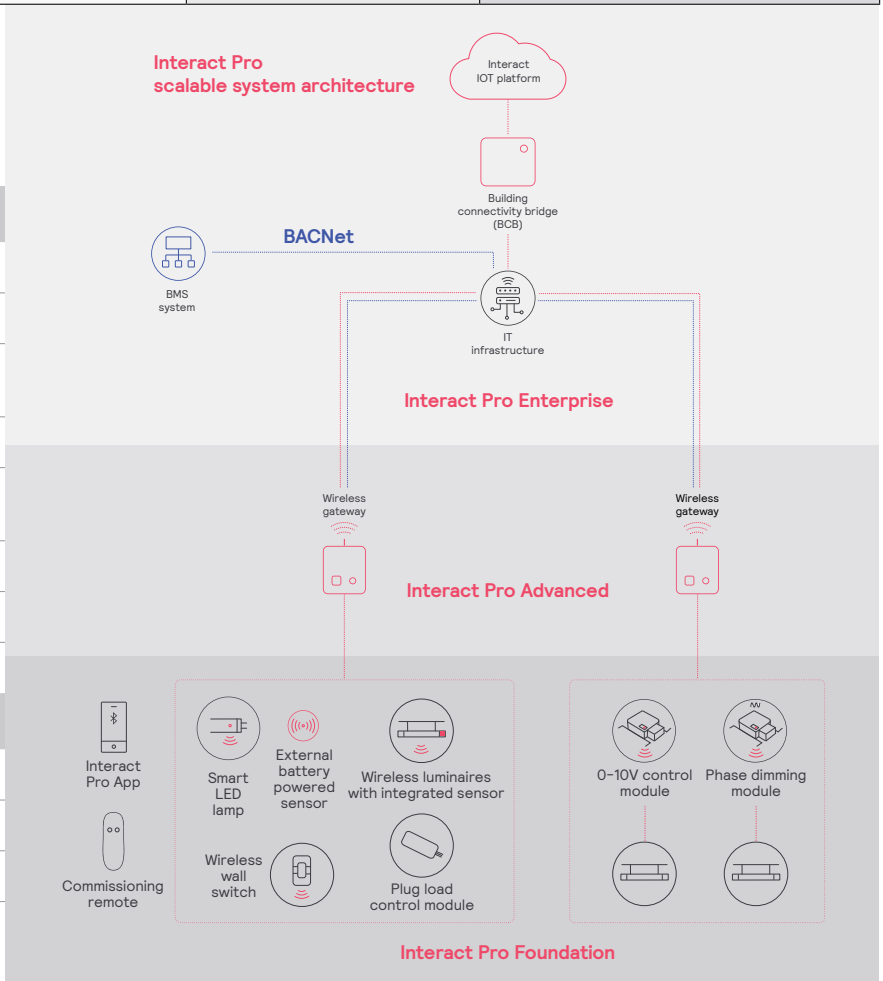
interact

	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
• luminaires with integrated sensors	150
• smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

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.

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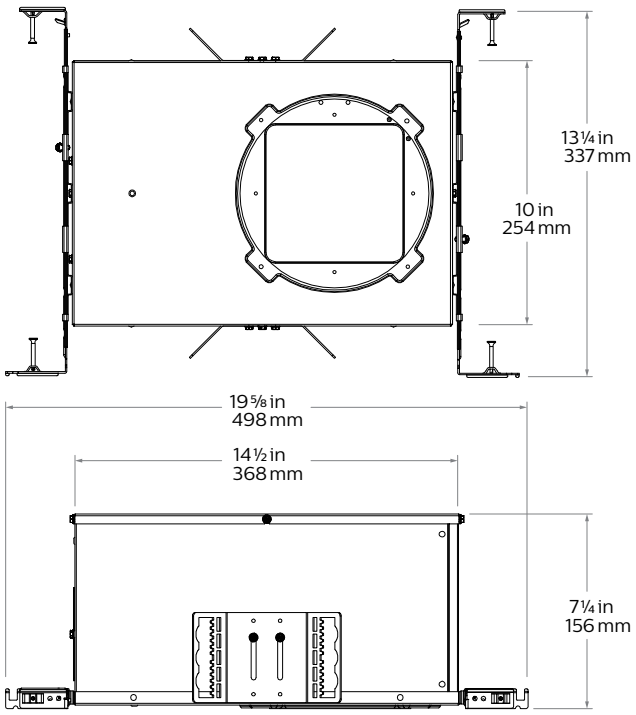
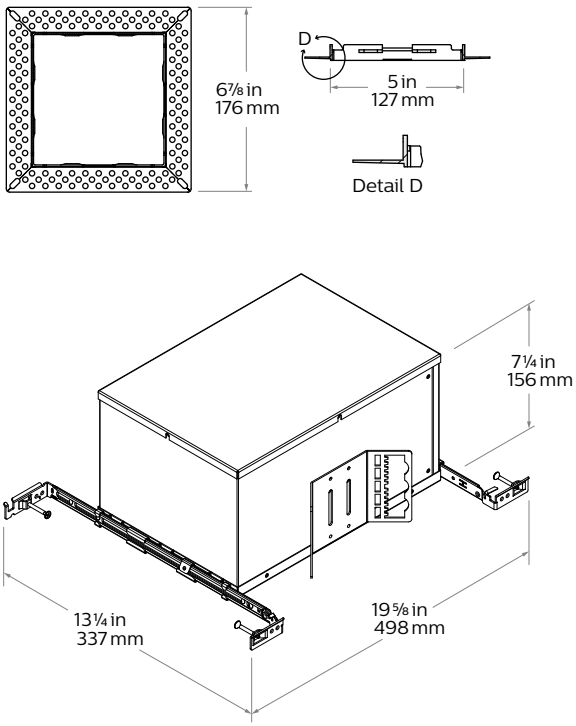
AirSeal (A)



Flangeless mud-in ring (CA4SFT) accessory



Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
C4L05_NZ10U/3	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
C4L10_NZ10U/3	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
C4L15_NZ10U/3	120V	50/60Hz	0.12	360 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
C4L20_NZ10U/3	120V	50/60Hz	0.17	490 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95

Medium/Wide

Light engine	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
C4L05_MZ10U/3	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
C4L10_MZ10U/3	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
C4L15_MZ10U/3	120V	50/60Hz	0.12	350 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
C4L20_MZ10U/3	120V	50/60Hz	0.16	470 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95

Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam
500lm 1000lm 1500lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
2000lm	Not Applicable	L80 @ 60,000hrs.

C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

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.

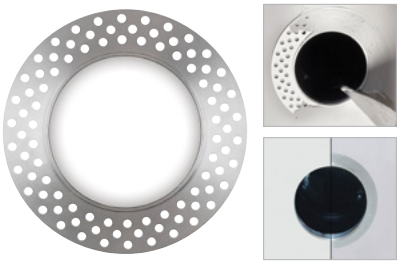
White (WH): (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).

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.



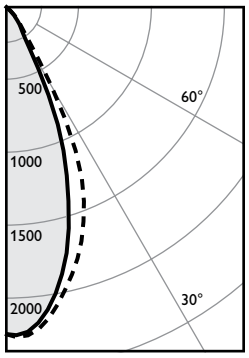
Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3⁄16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

Narrow beam, 1500lm Engine, 93.0 lm/w

Candela Curve



Frame: **4SA**
Engine: **C4L15835NZ10U**
Trim: **C4SDLNMCL**

CCT[1]:	3500K
Output lumens:	1369 lms
Input watts:	14.7 W (± 5%)
CRI:	80 min
Spacing Crit.:	0.7
Beam Angle:	45°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1142	83.4%
0-40	1311	95.7%
0-60	1369	100.0%
0-90	1369	100.0%

Angle	0°	45°	Lms
0	2242	2242	
5	2206	2238	207
10	1995	2072	
15	1661	1845	488
20	1234	1568	
25	783	1196	447
30	334	637	
35	197	264	168
40	132	156	
45	73	87	58
50	0	0	
55	0	0	0
60	0	0	
65	0	0	0
70	0	0	
75	0	0	0
80	0	0	
85	0	0	0
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	90	3.5'
6'	62	4.2'
7'	46	4.9'
8'	35	5.6'
9'	28	6.3'

* 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'	63.4	0.65
6'	41.6	0.43
7'	29.7	0.31
8'	24.8	0.25
9'	19.8	0.20

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

Efficacy: **93.0 lm/w**
Report[2]: T20161391

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 107%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 99%	2000lm = 133%
CZ = 63%	80CRI 2700K = 93%	1500lm = 100%
WH = 87%	90CRI 3000K = 87%	1000lm = 67%
BK = 57%	90CRI 2700K = 81%	500lm = 33%

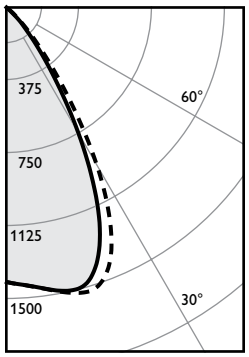
Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	114	112	109	107	109	106	105	102	102	99	95
2	109	105	101	98	103	97	100	95	97	93	89
3	104	99	94	91	97	90	95	88	92	87	84
4	100	93	88	84	92	84	90	83	88	82	80
5	95	88	83	79	87	79	85	78	84	77	75
6	91	83	78	74	83	74	81	73	80	73	71
7	87	79	74	70	78	70	77	69	76	69	67
8	84	75	70	66	75	66	74	66	73	66	64
9	80	72	66	63	71	63	70	62	69	62	61
10	77	68	63	60	68	60	67	59	66	59	58

Room Cavity Ratio

Medium beam, 1500lm Engine, 103.8 lm/w

Candela Curve



Frame: **4SA**
Engine: **C4L15835MZ10U**
Trim: **C4SDLNMCL**

CCT[1]:	3500K
Output lumens:	1475 lms
Input watts:	14.2 W (± 5%)
CRI:	80 min
Spacing Crit.:	0.9
Beam Angle:	58°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1092	74.0%
0-40	1393	94.5%
0-60	1475	100.0%
0-90	1475	100.0%

Angle	0°	45°	Lms
0	1414	1414	
5	1442	1442	139
10	1481	1484	
15	1494	1522	422
20	1387	1485	
25	1119	1287	531
30	755	943	
35	430	561	301
40	217	285	
45	100	129	82
50	0	0	
55	0	0	0
60	0	0	
65	0	0	0
70	0	0	
75	0	0	0
80	0	0	
85	0	0	0
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	57	4.5'
6'	39	5.4'
7'	29	6.3'
8'	22	7.2'
9'	17	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'	67.5	0.63
6'	44.3	0.41
7'	31.6	0.30
8'	26.4	0.25
9'	21.1	0.20

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

Efficacy: **103.8 lm/w**
Report[2]: T20161398

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	106	109	105	105	101	101	98	94
2	108	103	99	96	102	95	98	93	96	91	87
3	103	97	92	88	95	87	93	86	90	84	82
4	98	90	85	81	89	80	87	79	85	78	76
5	93	85	79	75	84	74	82	74	80	73	71
6	88	79	74	69	79	69	77	69	76	68	66
7	84	75	69	65	74	64	73	64	72	64	62
8	80	70	64	60	70	60	69	60	68	60	58
9	76	66	61	57	66	57	65	56	64	56	55
10	72	63	57	53	62	53	62	53	61	53	51

Room Cavity Ratio

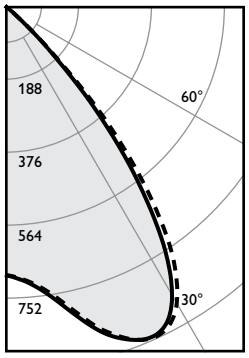
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C4SA Calculite LED 4" gen 3

Square AirSeal IC frame

Wide beam, 1500lm Engine, 90.8 lm/w

Candela Curve



Frame: **4SA**
Engine: **C4L15835MZ10U**
Trim: **C4SDLWCL**

CCT[1]:	3500K
Output lumens:	1288 lms
Input watts:	14.2 W (± 5%)
CRI:	80 min
Spacing Crit.:	1.2
Beam Angle:	69°

Zonal summary

Zone	Lumens	%Luminaire
0-30	725	56.3%
0-40	1141	88.6%
0-60	1288	100.0%
0-90	1288	100.0%

Angle	0°	45°	Lms
0	688	688	
5	713	709	69
10	766	757	
15	846	837	237
20	907	904	
25	923	928	419
30	854	878	
35	666	720	416
40	410	466	
45	163	181	146
50	28	27	
55	0	0	1
60	0	0	
65	0	0	0
70	0	0	
75	0	0	0
80	0	0	
85	0	0	0
90	0	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	28	6.0'
6'	19	7.2'
7'	14	8.4'
8'	11	9.6'
9'	8	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'	57.9	0.63
6'	38.0	0.41
7'	27.1	0.29
8'	22.6	0.25
9'	18.1	0.20

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

Efficacy: 90.8 lm/w
Report[2]: T20161399

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

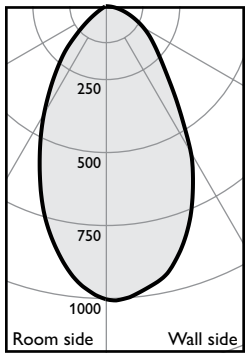
Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	107	105	108	103	104	100	100	97	93
2	107	102	97	93	100	92	97	90	94	88	85
3	101	94	88	84	92	83	90	82	87	81	78
4	95	87	80	76	85	75	83	74	81	74	71
5	89	80	74	69	79	69	77	68	75	67	65
6	84	74	67	63	73	63	72	62	70	62	60
7	79	69	62	57	68	57	67	57	65	57	55
8	74	64	57	53	63	53	62	52	61	52	50
9	70	59	53	49	59	48	58	48	57	48	46
10	66	56	49	45	55	45	54	45	53	44	43

Room Cavity Ratio

Lensed Wall Wash, 1500lm Engine, 83.1 lm/w

Candela Curve



Frame: **4SA**
Engine: **C4L15835MZ10U**
Trim: **C4SLWCL**

CCT[1]:	3500K
Output lumens:	1172 lms
Input watts:	14.1 W (± 5%)
CRI:	80 min

Efficacy: 83.1 lm/w
Report[2]: 1093GFR

Multiple unit data
Footcandles on wall

Distance from ceiling in feet	2' from wall	3' on ctr.	
1	27	17	27
2	31	25	31
3	29	26	29
4	25	24	25
5	20	20	20
6	16	16	16
7	13	13	13
8	11	11	11
9	9	9	9
10	8	8	8
12	7	7	7
14	6	6	6

Multiple unit data
Footcandles on wall

Distance from ceiling in feet	3' from wall	3' on ctr.	
1	11	10	11
2	18	17	18
3	19	19	19
4	19	19	19
5	19	19	19
6	17	17	17
7	15	15	15
8	13	13	13
9	11	11	11
10	10	10	10
12	8	8	8
14	7	7	7

Multiple unit data
Footcandles on wall (shown left)

Distance from ceiling in feet	3' from wall	4' on ctr.	
1	10	7	10
2	15	12	15
3	16	14	16
4	15	14	15
5	15	14	15
6	13	13	13
7	11	11	11
8	10	10	10
9	9	9	9
10	8	8	8
12	6	6	6
14	6	6	6

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

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.

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