



Calculite LED evolution 3" luminaires are meticulously engineered to provide consistent visual comfort, unsurpassed optical control and extraordinary mechanical precision. The portfolio also offers interchangeable optical assemblies providing flexibility in installation for commercial or residential construction.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Complete product = Frame + Engine + Trim

Frame

example: C3L085NUZ10VVB

Series	Installation	Voltage / Options	Version
C3L085	N		VB
C3L085 Calculite LED 3" evolution	N New construction	UEL AirSeal IC, 120/277V with ELV dimming (120V dimming only) ¹ UZ10V AirSeal IC, 120/277V with Lightolier 0-10V 1% dimming ¹ ULD AirSeal IC, 120/277V with Lutron L3DA Hi-Lume 1% EcoSystem LED driver (3-wire) ¹ ULH AirSeal IC, 120/277V with Lutron LDE1 Hi-Lume 1% EcoSystem LED driver (soft-on) ¹ (Fade-to-Black dimming)	VB Version B

Engine

example: C3L085DP0127K9FSPVB

Series	Style	Technology	CCT	CRI	Reflector	Version
C3L085	DP					VB
C3L085 Calculite LED 3" evolution	DP Downlight Pinhole	01 1000lm	27K 2700K 30K 3000K 35K 3500K 40K 4000K ¹	8 80 CRI 9 90 CRI ²	FSP Fresnel Spot SP Spot NF Narrow Flood FL Flood WFL Wide Flood	VB Version B

Trim

example: C3LDPBKF

Series	Style	Finish	Flange
C3L	DP		
C3L Calculite LED 3" evolution	DP Downlight Pinhole	SA Satin Aluminium BK Black (matte) WH White (matte)	F Pinhole Flushmount (requires CA3FMR)

Accessories (ordered with a flangeless trim)

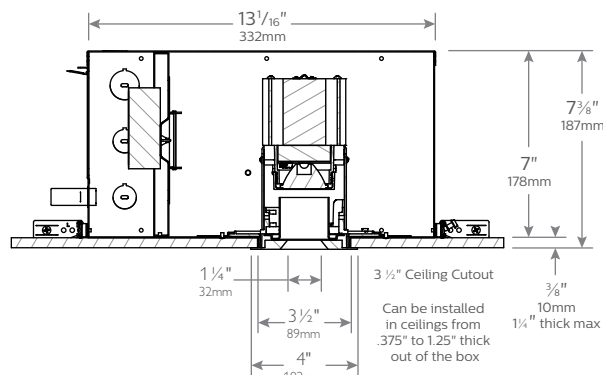
CA3FMR Mud-in ring for use with flangeless installations.

1. All frame-in-kits listed above are suitable for insulated ceilings, AirSeal and CCEA required installations.
2. The 90CRI is not available for 4000K.

C3LDP Calculite LED 3" Evolution

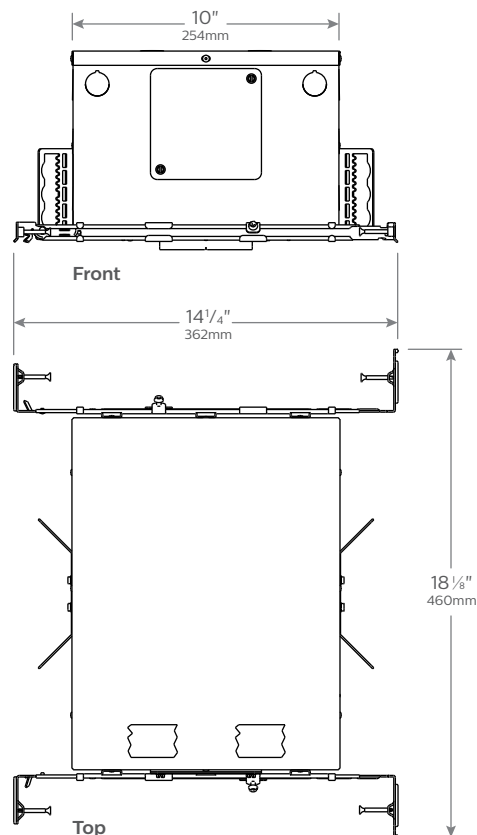
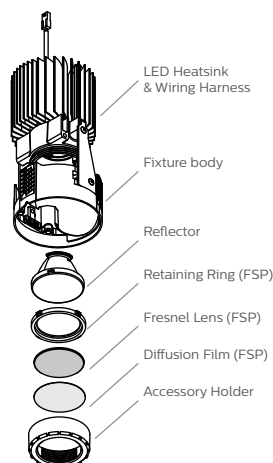
Downlight Pinhole

New Construction (N)



Optics:

- 5 beam spreads: Spot, Fresnel Spot, Narrow Flood, Flood, Wide Flood (Optical distribution determined with Light Engine).
- Fresnel spot provides clean beam with minimized spill light.
- Diffusion Films: Custom Engineered Diffusion Film (Optional) helps smooth/diffuse/soften any beam spread.



Features

Magnetic Trim attachment: Trim Kit attaches to appropriate Light Engine, which is keyed to ensure correct installation. Magnetic attachment helps to ensure trim is mounted flush with the ceiling (prevents gaps that can commonly occur with traditional friction spring installs). Allows for secure fit, but is much easier to remove/install when making adjustments.

Tether: Discrete steel cable tether fixed to the fixture body with snap in connector to reflector body which holds reflector secure while aiming unit or applying filters. Prevents accidental loss of trim from fixture.

Pinhole Faceplate: (ships with the Trim Kit) Machined aluminum faceplate is precisely cut at the oculus to minimize light obstruction and maximize output. 1.25" inner diameter effectively minimizes the overall visual appearance of the luminaire.

Horizontal Rotation Adjustment Mechanism: Die-cast aluminum ring w/matte black finish. Unique design which allows for 366° horizontal rotation with positive stop for aiming accent finishing sections. Tool less adjustment.

Finishing Section Retention: Finishing section is attached to Frame in Kit by 3 symmetrically offset spring loaded ball and groove mating parts. This mounting system offers a smoother, near effortless initial installation of the Finishing Section and the ability to fine tune the height to match any ceiling thickness in the range mentioned above.

Light Engine Assembly: LED light engine is positioned to have 50° cut-off at nadir position for adjustable accent and traverses thru adjustment for ideal light source positioning and maximizing accent capability.

Frame Mounting: Accommodates virtually any commercial installation with adjustable, pre-installed mounting brackets and user supplied 0.5" EMT Tubing or Lightolier purchased mounting bars. Additionally accommodates mounting to residential joist (steel or wood) construction spacing 12" to 24" On Center (O.C.) joists with supplied mounting bars (Lightening Bars). Minimum joist height of 8" required.

LED Driver: Serviceable and Replaceable from below ceiling. Four compatible dimming technologies are available depending on driver option: 0-10 Volt, Electric Low Voltage (ELV) and Lutron Dimming 3-wire and EcoSystem.

Frame-In Kit: IC AirSeal - Luminaire may be in direct contact with thermal insulation. Chicago Plenum Rated. See Frame-In Kit specification sheets for more information.

Options and Accessories

2" dia. Color Filters/Specialty filters: See ADF2/AF2 specification sheets

2" dia. Diffusion Films: CA3DF1 (1°), CA3DF2 (2°), and CA3DF5 (5°)

2" dia. Louver: AL2HC

Plaster Trim Ring: CA3FMR (use with flangeless trim)

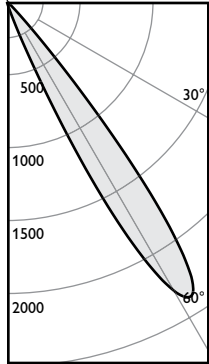
Labels and Certifications

cU.L.us (suitable for damp locations)
I.B.E.W., Title 24, ENERGY STAR®

C3LDP Calculite LED 3" Evolution

Downlight Pinhole

Fresnel Spot, 1000lm Engine, 10.9 lm/W



Frame: **C3L085NUZ10VVB**
Engine: **C3L085DP0135K8FSPVB**
Trim: **C3LDPBK**

Output lumens: 141 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT: 3500K
Spacing Crit.: 0.22
Beam Angle: 13°

Zonal summary

Zone	Lumens	%Luminaire
0-30	139	98.8%
0-40	140	99.5%
0-60	141	100.0%
0-90	141	100.0%

Angle	Mean CP	Lumens
0	2482	
5	1818	117
10	332	
15	40	18
20	15	
25	7	3
30	3	
35	2	1
40	1	
45	0	0
50	0	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	99	1.1'
6'	69	1.3'
7'	51	1.5'
8'	39	1.8'
9'	31	2.0'

* 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'	6.9	0.57
6'	4.5	0.38
7'	3.2	0.27
8'	2.7	0.22
9'	2.2	0.18

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

Efficacy: 10.9 lm/w

Report#: 1138GFR

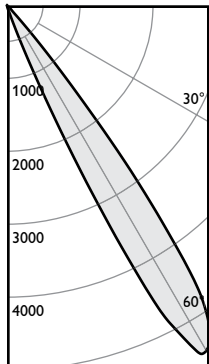
Adjustment factors

Finish	CCT	CRI
CL = 100%	4000K = 101%	80CRI = 100%
CCL = 95%	3500K = 100%	90CRI = 82%
CCD = 88%	3000K = 98%	
WH = 84%	2700K = 93%	

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%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	116	115	113	112	113	110	109	107	105	104	99
	2	114	111	109	107	110	106	107	104	104	102	98
	3	112	108	106	104	107	103	105	102	103	100	98
	4	110	106	104	102	105	101	103	100	102	99	97
	5	108	104	102	100	104	99	102	99	101	98	96
	6	107	103	100	98	102	98	101	97	100	97	96
	7	106	102	99	97	101	97	100	97	99	96	95
	8	105	100	98	96	100	96	99	96	99	95	94
	9	104	100	97	95	99	95	99	95	98	95	94
10	103	99	96	95	98	95	98	94	97	94	93	

Spot, 1000lm Engine, 25.8 lm/W



Frame: **C3L085NUZ10VVB**
Engine: **C3L085DP0135K8SPVB**
Trim: **C3LDPBK**

Output lumens: 333 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT: 3500K
Spacing Crit.: 0.20
Beam Angle: 12°

Zonal summary

Zone	Lumens	%Luminaire
0-30	328	98.4%
0-40	331	99.5%
0-60	333	99.9%
0-90	333	100.0%

Angle	Mean CP	Lumens
0	6973	
5	4494	587
10	705	
15	73	34
20	32	
25	17	7
30	13	
35	4	4
40	2	
45	1	1
50	1	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	279	1.0'
6'	194	1.2'
7'	142	1.4'
8'	109	1.6'
9'	86	1.8'

* 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'	16.4	0.57
6'	10.7	0.38
7'	7.7	0.27
8'	6.4	0.22
9'	5.1	0.18

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

Efficacy: 25.8 lm/w

Report#: 1139GFR

Adjustment factors

Finish	CCT	CRI
CL = 100%	4000K = 101%	80CRI = 100%
CCL = 95%	3500K = 100%	90CRI = 82%
CCD = 88%	3000K = 98%	
WH = 84%	2700K = 93%	

Coefficients of utilization

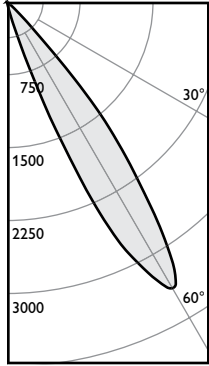
Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	116	115	113	112	113	110	109	107	105	104	99
	2	114	111	109	107	110	106	107	104	104	102	98
	3	112	109	106	104	107	103	105	102	103	100	98
	4	110	107	104	102	106	101	104	100	102	99	97
	5	109	105	102	100	104	100	103	99	101	98	97
	6	107	103	101	99	103	99	102	98	100	97	96
	7	106	102	100	98	102	98	101	97	100	97	96
	8	105	101	99	97	101	97	100	96	99	96	95
	9	104	100	98	96	100	96	99	96	99	95	95
10	103	99	97	95	99	95	98	95	98	95	94	

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.

C3LDP Calculite LED 3" Evolution

Downlight Pinhole

Narrow Flood, 1000lm Engine, 27.5 lm/W



Frame: **C3L085NUZ10VVB**
Engine: **C3L085DP0135K8NFVB**
Trim: **C3LDPBK**

Output lumens: 354 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT: 3500K
Spacing Crit.: 0.28
Beam Angle: 16°

Zonal summary

Zone	Lumens	%Luminaire
0-30	349	98.6%
0-40	353	99.5%
0-60	354	99.9%
0-90	354	100.0%

Angle	Mean CP	Lumens
0	4263	246
5	3177	
10	1408	
15	218	
20	32	
25	15	8
30	13	
35	4	3
40	2	
45	1	1
50	1	
55	1	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	171	1.4'
6'	118	1.7'
7'	87	2.0'
8'	67	2.2'
9'	53	2.5'

* 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'	17.3	0.57
6'	11.4	0.38
7'	8.1	0.27
8'	6.8	0.22
9'	5.4	0.18

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

Efficacy: 27.5 lm/w

Report: 1140GFR

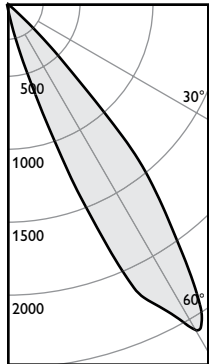
Adjustment factors

Finish	CCT	CRI
CL = 100%	4000K = 101%	80CRI = 100%
CCL = 95%	3500K = 100%	90CRI = 82%
CCD = 88%	3000K = 98%	
WH = 84%	2700K = 93%	

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%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	116	114	113	111	112	110	108	106	105	103	99						
2	113	111	108	106	109	105	106	103	103	101	97						
3	111	107	105	103	106	102	104	100	102	99	96						
4	109	105	102	100	104	99	102	98	100	97	95						
5	107	103	100	97	102	97	100	96	99	95	94						
6	105	101	98	96	100	95	99	95	98	94	93						
7	104	99	96	94	99	94	98	93	97	93	92						
8	102	98	95	93	97	93	96	92	96	92	91						
9	101	96	93	91	96	91	95	91	95	91	90						
10	100	95	92	90	95	90	94	90	94	90	89						

Flood, 1000lm Engine, 27.2 lm/W



Frame: **C3L085NUZ10VVB**
Engine: **C3L085DP0135K8FLVB**
Trim: **C3LDPBK**

Output lumens: 351 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT: 3500K
Spacing Crit.: 0.32
Beam Angle: 19°

Zonal summary

Zone	Lumens	%Luminaire
0-30	346	98.8%
0-40	349	99.5%
0-60	350	99.9%
0-90	351	100.0%

Angle	Mean CP	Lumens
0	3181	207
5	2522	
10	1444	
15	415	
20	48	
25	15	8
30	8	
35	4	2
40	2	
45	1	1
50	1	
55	1	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	127	1.6'
6'	88	1.9'
7'	65	2.2'
8'	50	2.6'
9'	39	2.9'

* 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'	17.0	0.57
6'	11.2	0.38
7'	8.0	0.27
8'	6.6	0.22
9'	5.3	0.18

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

Efficacy: 27.2 lm/w

Report: 1141GFR

Adjustment factors

Finish	CCT	CRI
CL = 100%	4000K = 101%	80CRI = 100%
CCL = 95%	3500K = 100%	90CRI = 82%
CCD = 88%	3000K = 98%	
WH = 84%	2700K = 93%	

Coefficients of utilization

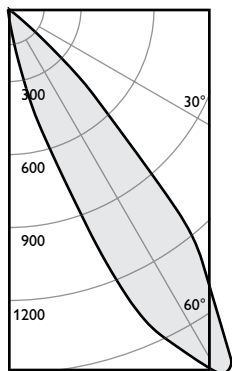
Ceiling	80%				70%				50%				30%				0%
Wall	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	116	114	112	111	112	109	108	106	104	103	98						
2	113	110	107	105	108	104	105	102	102	100	96						
3	110	106	103	101	105	100	103	99	101	97	95						
4	108	103	100	98	102	97	101	96	99	95	93						
5	106	101	98	95	100	95	99	94	97	93	92						
6	104	99	96	93	98	93	97	92	96	92	90						
7	102	97	94	91	96	91	95	91	94	90	89						
8	100	95	92	90	95	90	94	89	93	89	88						
9	98	93	90	88	93	88	92	88	92	88	87						
10	97	92	89	87	92	87	91	87	90	86	86						

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.

C3LDP Calculite LED 3" Evolution

Downlight Pinhole

Wide Flood, 1000lm Engine, 23.6 lm/W



Frame: **C3L085NUZ10VVB**
 Engine: **C3L085DP0135K8WFLVB**
 Trim: **C3LDPBK**

Output lumens: 304 lms
 Input watts: 12.9 W (± 5%)
 CRI: 80 min
 CCT: 3500K
 Spacing Crit.: 0.36
 Beam Angle: 21°

Zonal summary

Zone	Lumens	%Luminaire
0-30	300	98.5%
0-40	303	99.4%
0-60	304	100.0%
0-90	304	100.0%

Angle	Mean CP	Lumens
0	2149	
5	1710	146
10	1127	
15	493	138
20	133	
25	18	16
30	11	
35	4	3
40	2	
45	1	0
50	1	
55	1	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	86	1.8'
6'	60	2.2'
7'	44	2.5'
8'	34	2.9'
9'	27	3.2'

* 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'	14.7	0.57
6'	9.7	0.38
7'	6.9	0.27
8'	5.7	0.22
9'	4.6	0.18

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

Efficacy: 23.6 lm/w
 Report#: 1142GFR

Adjustment factors

Finish	CCT	CRI
CL = 100%	4000K = 101%	80CRI = 100%
CCL = 95%	3500K = 100%	90CRI = 82%
CCD = 88%	3000K = 98%	
WH = 84%	2700K = 93%	

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	107	107	100	107	107	107	107	100
1	116	114	112	111	112	109	108	105	104	102	102	98	104	102	102	102	98
2	112	109	107	104	108	103	105	101	102	99	96	96	100	96	96	96	93
3	110	105	102	100	104	99	102	98	100	96	93	91	97	94	94	94	91
4	107	102	99	96	101	96	99	95	97	92	89	86	94	89	89	89	86
5	104	99	96	93	98	93	97	92	95	91	88	85	92	87	87	87	84
6	102	97	93	91	96	90	95	90	94	89	86	83	90	85	85	85	82
7	100	94	91	88	94	88	93	88	92	87	84	81	88	83	83	83	80
8	98	92	89	86	92	86	91	86	90	85	82	79	86	81	81	81	78
9	96	90	87	84	90	84	89	84	88	83	80	77	84	79	79	79	76
10	94	88	85	83	88	83	87	83	86	81	78	75	82	77	77	77	74

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.

