



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: C3L085A0127K9FSPVB

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

Trim

example: C3LACL or C3LAPBKF

Series	Style	Finish	Flange
C3L			
C3L Calculite LED 3" evolution	A Adjustable	CL Specular clear CCL Comfort clear CCD Comfort clear diffuse CCZ Champagne bronze BK Black (matte) WH White (matte)	W White (matte) P Polished (anodized only) FT Flangeless (requires CA3FMR)
	AP Adjustable Pinhole	SA Satin Aluminium BK Black (matte) WH White (matte)	- Leave blank for white (standard flange) F Pinhole Flushmount (requires CA3FMR)

Accessories (ordered with a flangeless trim)

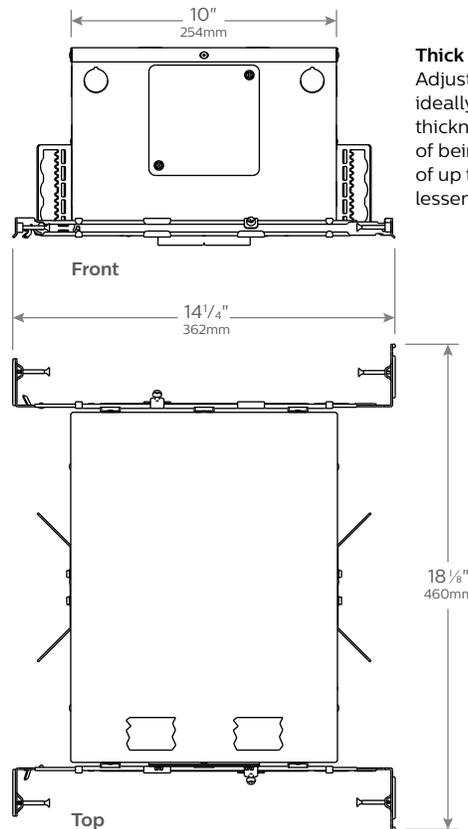
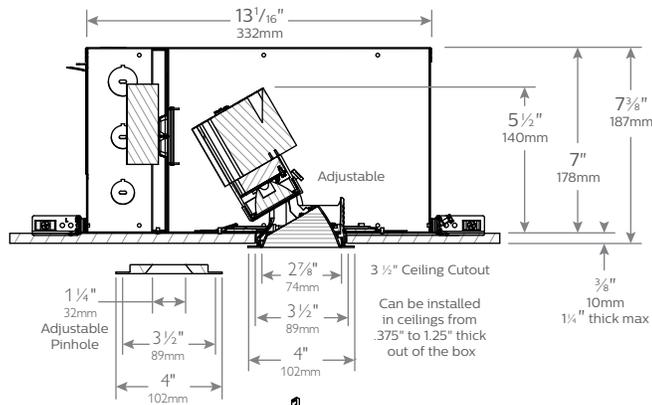
CA3FMR Mud-in ring for use with flangeless installations.

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.

C3LA Calculite LED 3" Evolution

Adjustables

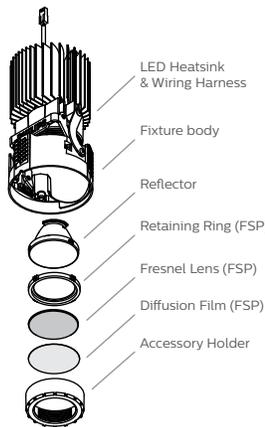
New Construction (N)



Thick Ceiling Ready Brackets: Adjustable Accent functions ideally tuned at 5/8" ceiling thicknesses, but is capable of being utilized in ceiling of up to 1.25" thick with lessened adjustability.

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 ensures trim mounts 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.

Aperture Cone: No glare; 0.040" aluminum, white or anodized – clear, comfort clear, comfort clear diffused, wheat (bronze) or black; Trim flange painted white or polished. Flangeless trim used with plaster mud-in-ring accessory – see options and accessories.

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"), AL2HC and CA3DF5 (5")

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®

C3LA Calculite LED 3" Evolution

Adjustables

Adjustable Accent – ENERGY STAR®

Model	Reflector finish	Dimming / Driver	CRI
C3L085NULHVB / C3L085A01**K8***VB / C3LAWH**	White painted	Lutron EcoSystem	80CRI
C3L085NULHVB / C3L085A01**K8***VB / C3LACCZ**	Champagne bronze	Lutron EcoSystem	80CRI
C3L085NULHVB / C3L085A01**K8***VB / C3LACCD**	Comfort clear diffuse	Lutron EcoSystem	80CRI
C3L085NULHVB / C3L085A01**K8***VB / C3LACCL**	Comfort clear	Lutron EcoSystem	80CRI
C3L085NULHVB / C3L085A01**K8***VB / C3LACL**	Clear anodized	Lutron EcoSystem	80CRI

Model	Reflector finish	Dimming / Driver	CRI
C3L085NUZ10VVB / C3L085A01**K8***VB / C3LAWH**	White painted	0-10V	80CRI
C3L085NUZ10VVB / C3L085A01**K8***VB / C3LACCZ**	Champagne bronze	0-10V	80CRI
C3L085NUZ10VVB / C3L085A01**K8***VB / C3LACCD**	Comfort clear diffuse	0-10V	80CRI
C3L085NUZ10VVB / C3L085A01**K8***VB / C3LACCL**	Comfort clear	0-10V	80CRI
C3L085NUZ10VVB / C3L085A01**K8***VB / C3LACL**	Clear anodized	0-10V	80CRI

Model	Reflector finish	Dimming / Driver	CRI
C3L085NUELVB / C3L085A01**K8***VB / C3LABK**	White painted	ELV	80CRI
C3L085NUELVB / C3L085A01**K8***VB / C3LAWH**	Champagne bronze	ELV	80CRI
C3L085NUELVB / C3L085A01**K8***VB / C3LACCZ**	Comfort clear diffuse	ELV	80CRI
C3L085NUELVB / C3L085A01**K8***VB / C3LACCD**	Comfort clear	ELV	80CRI
C3L085NUELVB / C3L085A01**K8***VB / C3LACL**	Clear anodized	ELV	80CRI

Adjustable Accent – Title 24

Model	Reflector finish	Dimming / Driver	CRI & CCT
C3L085NUELVB/C3L085A01**K9***VB/C3LABK**	Black painted	ELV	90CRI, 2700/3000/3500/4000K
C3L085NUELVB/C3L085A01**K9***VB/C3LACCD**	Comfort clear diffuse	ELV	90CRI, 2700/3000/3500/4000K
C3L085NUELVB/C3L085A01**K9***VB/C3LACCL**	Comfort clear	ELV	90CRI, 2700/3000/3500/4000K
C3L085NUELVB/C3L085A01**K9***VB/C3LACCZ**	Champagne bronze	ELV	90CRI, 2700/3000/3500/4000K
C3L085NUELVB/C3L085A01**K9***VB/C3LACL**	Clear anodized	ELV	90CRI, 2700/3000/3500/4000K
C3L085NUELVB/C3L085A01**K9***VB/C3LAWH**	White painted	ELV	90CRI, 2700/3000/3500/4000K

Model	Reflector finish	Dimming / Driver	CRI & CCT
C3L085NULHVB/C3L085A01**K9***VB/C3LABK**	Black painted	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K
C3L085NULHVB/C3L085A01**K9***VB/C3LACCD**	Comfort clear diffuse	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K
C3L085NULHVB/C3L085A01**K9***VB/C3LACCL**	Comfort clear	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K
C3L085NULHVB/C3L085A01**K9***VB/C3LACCZ**	Champagne bronze	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K
C3L085NULHVB/C3L085A01**K9***VB/C3LACL**	Clear anodized	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K
C3L085NULHVB/C3L085A01**K9***VB/C3LAWH**	White painted	Lutron Ecosystem	90CRI, 2700/3000/3500/4000K

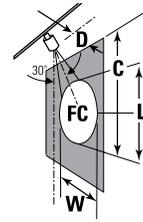
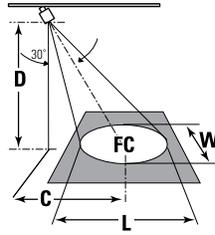
C3LA Calculite LED 3" Evolution

Adjustables

Aiming angles - adjustable

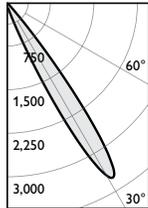
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3500K, use the table on the right for CRI/CCT adjustment factors.

L Beam length
D Distance
W Beam Width
A Aiming Angle
FC Footcandles
C Distance to center beam
CBCP Center Beam Candlepower.



Adjustment factors

CRI	CCT	Multiplier
80	4000K	1.01
	3500K	1.00
	3000K	0.98
	2700K	0.93
90	3000K	0.81
	2700K	0.78
90CW	3500K	0.85



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8FSPVB**
Trim: **C3LAACLW**

Output lumens: 242 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 3,514 cd
Beam Angle: 12°

Fresnel Spot

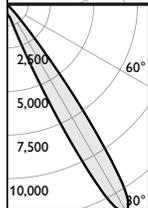
30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	63	1.7	1.5
8	4.6	36	2.3	1.9
10	5.8	23	2.8	2.4
12	6.9	16	3.4	2.9

30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	110	1.7	0.8
3	5.2	49	2.6	1.3
4	6.9	27	3.5	1.7
5	8.7	18	4.3	2.1

Efficacy: **18.8 lm/w**
Report²: 1156GFR



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8SPVB**
Trim: **C3LAACLW**

Output lumens: 980 lms
Input watts: 13.0 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 13,640 cd
Beam Angle: 13°

Spot

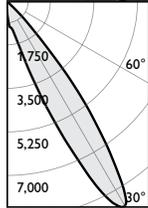
30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	246	1.8	1.6
8	4.6	138	2.4	2.1
10	5.8	89	3.1	2.6
12	6.9	62	3.7	3.2

30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	426	1.9	0.9
3	5.2	189	2.8	1.4
4	6.9	107	3.8	1.8
5	8.7	68	4.7	2.3

Efficacy: **75.4 lm/w**
Report²: 1157GFR



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8NFVB**
Trim: **C3LAACLW**

Output lumens: 913 lms
Input watts: 13.0 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 7,588 cd
Beam Angle: 17°

Narrow Flood

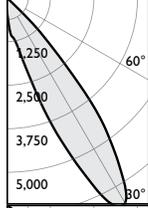
30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	137	2.4	2.1
8	4.6	77	3.2	2.8
10	5.8	49	4.0	3.5
12	6.9	34	4.8	4.1

30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	237	2.6	1.2
3	5.2	105	3.8	1.8
4	6.9	59	5.1	2.4
5	8.7	38	6.4	3.0

Efficacy: **70.2 lm/w**
Report²: 1158GFR



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8FLVB**
Trim: **C3LAACLW**

Output lumens: 886 lms
Input watts: 13.0 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 5,425 cd
Beam Angle: 21°

Flood

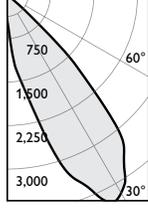
30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	98	3.0	2.6
8	4.6	55	4.0	3.4
10	5.8	35	5.0	4.3
12	6.9	24	6.0	5.1

30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	170	3.3	1.5
3	5.2	75	5.0	2.2
4	6.9	42	6.6	3.0
5	8.7	27	8.3	3.7

Efficacy: **68.2 lm/w**
Report²: 1159GFR



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8WFLVB**
Trim: **C3LAACLW**

Output lumens: 859 lms
Input watts: 13.0 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 3,211 cd
Beam Angle: 30°

Wide Flood

30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	58	4.4	3.7
8	4.6	33	5.9	5.0
10	5.8	21	7.3	6.2
12	6.9	14	8.8	7.4

30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	100	5.5	2.1
3	5.2	45	8.2	3.2
4	6.9	25	10.9	4.3
5	8.7	16	13.7	5.4

Efficacy: **66.1 lm/w**
Report²: 1160GFR

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.

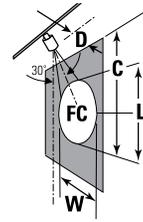
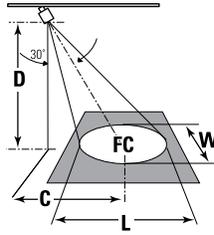
C3LA Calculite LED 3" Evolution

Adjustables

Aiming angles - adjustable pinhole

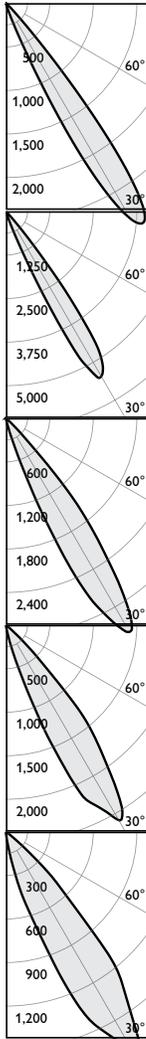
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3500K, use the table on the right for CRI/CCT adjustment factors.

L Beam length
D Distance
W Beam Width
A Aiming Angle
FC Footcandles
C Distance to center beam
CBCP Center Beam Candlepower.



Adjustment factors

CRI	CCT	Multiplier
80	4000K	1.01
	3500K	1.00
	3000K	0.98
	2700K	0.93
90	3000K	0.81
	2700K	0.78
90CW	3500K	0.85



Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8FSPVB**
Trim: **C3LAPBK**

Output lumens: 130 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 2,375 cd
Beam Angle: 13°

Fresnel Spot

30° Horizontal Aiming

Distance		F.C.	Beam	
D	C		L	W
6	3.5	43	1.8	1.6
8	4.6	24	2.4	2.1
10	5.8	15	3.1	2.6
12	6.9	11	3.7	3.2

30° Vertical Aiming

Distance		F.C.	Beam	
D	C		L	W
2	3.5	74	1.9	0.9
3	5.2	33	2.8	1.4
4	6.9	19	3.8	1.8
5	8.7	12	4.7	2.3

Efficacy: **10.1 lm/w**
Report²: 1165GFR

Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8SPVB**
Trim: **C3LAPBK**

Output lumens: 292 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 5,455 cd
Beam Angle: 13°

Spot

30° Horizontal Aiming

Distance		F.C.	Beam	
D	C		L	W
6	3.5	98	1.8	1.6
8	4.6	55	2.4	2.1
10	5.8	35	3.1	2.6
12	6.9	25	3.7	3.2

30° Vertical Aiming

Distance		F.C.	Beam	
D	C		L	W
2	3.5	170	1.9	0.9
3	5.2	76	2.8	1.4
4	6.9	43	3.8	1.8
5	8.7	27	4.7	2.3

Efficacy: **22.6 lm/w**
Report²: 1164GFR

Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8NFVB**
Trim: **C3LAPBK**

Output lumens: 320 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 3,393 cd
Beam Angle: 17°

Narrow Flood

30° Horizontal Aiming

Distance		F.C.	Beam	
D	C		L	W
6	3.5	61	2.4	2.1
8	4.6	34	3.2	2.8
10	5.8	22	4.0	3.5
12	6.9	15	4.8	4.1

30° Vertical Aiming

Distance		F.C.	Beam	
D	C		L	W
2	3.5	106	2.6	1.2
3	5.2	47	3.8	1.8
4	6.9	27	5.1	2.4
5	8.7	17	6.4	3.0

Efficacy: **24.8 lm/w**
Report²: 1163GFR

Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8FLVB**
Trim: **C3LAPBK**

Output lumens: 312 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 2,579 cd
Beam Angle: 20°

Flood

30° Horizontal Aiming

Distance		F.C.	Beam	
D	C		L	W
6	3.5	47	2.9	2.4
8	4.6	26	3.8	3.3
10	5.8	17	4.8	4.1
12	6.9	12	5.7	4.9

30° Vertical Aiming

Distance		F.C.	Beam	
D	C		L	W
2	3.5	81	3.1	1.4
3	5.2	36	4.7	2.1
4	6.9	20	6.2	2.8
5	8.7	13	7.8	3.5

Efficacy: **24.2 lm/w**
Report²: 1162GFR

Frame: **C3L085NUZ10VVB**
Engine: **C3L085A0135K8WFLVB**
Trim: **C3LAPBK**

Output lumens: 284 lms
Input watts: 12.9 W (±5%)
CRI: 80 min
CCT¹: 3500K
CBCP: 1,726 cd
Beam Angle: 22°

Wide Flood

30° Horizontal Aiming

Distance		F.C.	Beam	
D	C		L	W
6	3.5	31	3.1	2.7
8	4.6	18	4.2	3.6
10	5.8	11	5.2	4.5
12	6.9	8	6.3	5.4

30° Vertical Aiming

Distance		F.C.	Beam	
D	C		L	W
2	3.5	54	3.5	1.6
3	5.2	24	5.3	2.3
4	6.9	13	7.0	3.1
5	8.7	9	8.8	3.9

Efficacy: **22.0 lm/w**
Report²: 1161GFR

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.

