

Concerto LED - LD3B

3-1/2" Series

Low Profile Square Adjustable Trim

DESCRIPTION

The adjustable round or square trims, will provide a maximum accent lighting that will be useful in various applications such as the library, kitchen, corridor, etc...

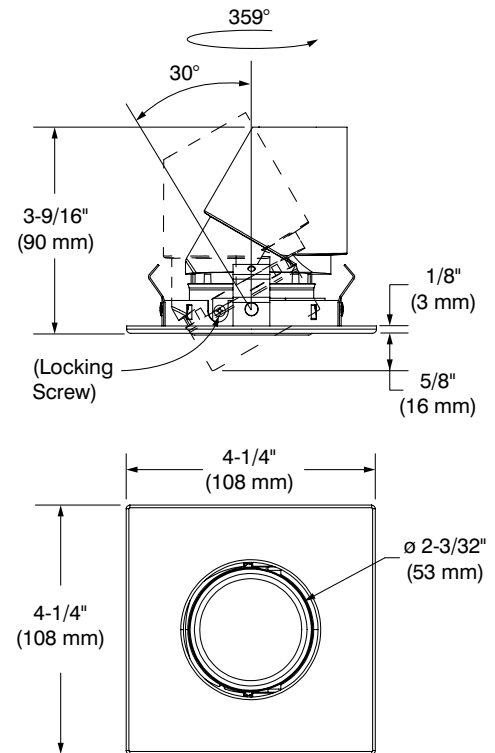
SPECIFICATIONS

COLOR TEMPERATURE	2,700K, 3,000K, 3,500K and 4,000K		
CRI	80 +	90 + (only at 3,000K)	
POWER SUPPLY	Several driver models available giving you 3 dimming options: ELV, 0-10V or Pulse Width Modulation (PWM).		
LED MODULE	Bridgelux Vero 18, delivers a lumen maintenance greater than 70% after 50,000 hours of operation (L_{70}). Provides a high quality true color and a clean white light without hot spots. Binning within 3 steps on MacAdam ellipse. Surpass ANSI binning requirements.		
DELIVERED LUMENS (Determined by the choice of housing)	Performance 1: 1,100 lumens, 70 lm/W Performance 2: 1,575 lumens, 68 lm/W		
TRIM	Powder coated paint or plated die-formed steel. Different finishes available. Painted finishes available with Marine Grade option.		
OPTIC SYSTEM	Interchangeable optional optical reflectors and lenses available to personalize your lighting. Protection lens covered with a high-performance film 98% effective. Lens of 1/8" (3 mm) thick and 1.9" (49 mm) Ø. Choice of available lenses: Clear (C), Frosted (F), Honeycomb (H), Linear (L), Prismatic (P) and Solite (S) Optical reflectors available: M: Narrow Flood → 27° W: Flood → 47°		
ADJUSTABILITY	Swivel: 360° 30° tilt and with locking position. Choose aiming angle then tighten screws to lock into position.		
HEAT SINK	High quality injected aluminum heat sink ensuring maximum heat dissipation.		
CEILING CUTOUT	Ø 3-5/8" (92 mm)		
COMPATIBLE HOUSINGS		Remodel Housing	New Construction Housing
(Performance 2 trims work with either performance 1 and 2 housings.)	Performance 1 (1,500 lumens)	RELD300LD1 RELD300LA1	NWLD300LD1 NWLD300LA1
	Performance 2 (2,000 lumens)	RELD300LE2 RELD300LD2 RELD300LA2	NWLD300LE2 NWLD300LD2 NWLD300LA2
			Insulated Housing ISLD300LD1 ISLD300LA1
	Not available		
	For dimming, please refer to the selected housing specification sheet.		
CERTIFICATION	cULus E343977 for damp locations		
WARRANTY	1 year for standard finishes, 2 years on "Marine Grade" finish and 5 years on LED module.		

Project	_____
Notes	_____
Fixture Type	_____
Date	_____



LD3BC-04BR
(illustrated)



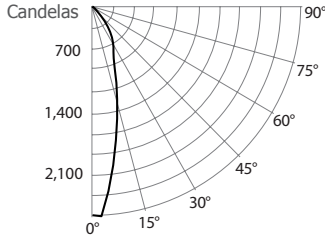
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PHOTOMETRIC DATA

3,000K, 80 + of CRI, Narrow Flood with performance 1 housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	68.2	3.0'
08'	38.4	4.0'
10'	24.6	5.0'
12'	17.1	5.9'
14'	12.5	6.9'
16'	9.6	7.9'

Beam: 28°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBCP / Lumens	2,456	/ 1,094
Watts	120V	277V
	16.16W	16.66W
Operating AMPS	0.13A	0.060A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	67.5	
Spacing Criteria	0.5	
Certificate LM79-08	Based on test 475821	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	106	103	101	99	98	96
	4	96	91	93	89	91	88
	6	87	82	85	81	83	80
	8	78	74	77	73	76	72
	10	71	66	70	66	69	65

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	779	71.24%
0-40	1,004	91.76%
0-60	1,089	99.59%
60-90	4	0.41%
0-90	1,094	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	53	0.72
6'	30	0.4
7'	21	0.28
8'	21	0.28
9'	13	0.17

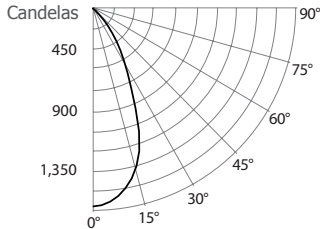
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,456	45	97
5	2,186	55	4
10	1,600	65	2
15	1,130	75	2
20	773	85	0
25	589	90	0
35	367		

3,000K, 80 + of CRI, Flood with performance 1 housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	43.3	5.3'
08'	24.3	7.0'
10'	15.6	8.8'
12'	10.8	10.5'
14'	7.9	12.3'
16'	6.1	14.1'

Beam: 47°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Flood
CBCP / Lumens	1,558	/ 1,088
Watts	120V	277V
	15.53W	16.03W
Operating AMPS	0.19A	0.058A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	70.2	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 475823	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	106	103	101	99	99	97
	4	97	92	93	90	92	89
	6	88	83	86	82	84	81
	8	80	75	78	74	77	74
	10	73	68	71	67	71	67

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	822	75.4%
0-40	1,020	93.7%
0-60	1,085	99.6%
60-90	4	0.4%
0-90	1,088	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	53	0.69
6'	30	0.39
7'	21	0.27
8'	21	0.27
9'	13	0.17

Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,558	45	73
5	1,527	55	3
10	1,438	65	3
15	1,287	75	1
20	1,032	85	0
25	698	90	0
35	318		

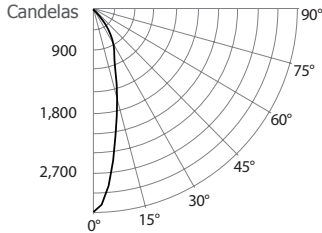
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PHOTOMETRIC DATA

3,000K, 80 + of CRI, Narrow Flood with performance 2 housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	88.9	2.9'
08'	50.0	3.9'
10'	32.0	4.9'
12'	22.2	5.8'
14'	16.3	6.8'
16'	12.5	7.8'

Beam: 27°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	3,200	/ 1,435
Watts	120V	277V
	23.2W	23.7W
Operating AMPS	0.13A	0.060A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	61.8	
Spacing Criteria	0.4	
Certificate LM79-08	Based on test 606976	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	106	103	101	99	98	96
	4	96	91	92	89	90	87
	6	87	81	84	80	83	79
	8	78	73	76	72	76	72
	10	71	66	69	65	69	65

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,015	70.72%
0-40	1,309	91.23%
0-60	1,427	99.49%
60-90	7	0.51%
0-90	1,435	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	69	1.03
6'	39	0.58
7'	27	0.4
8'	27	0.4
9'	17	0.26

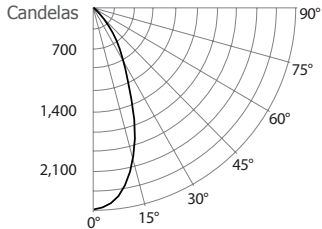
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	3,200	45	133
5	2,801	55	8
10	2,030	65	3
15	1,462	75	3
20	1,025	85	0
25	789	90	0
35	480		

3,000K, 80 + of CRI, Flood with performance 2 housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	66.3	4.9'
08'	37.3	6.5'
10'	23.9	8.2'
12'	16.6	9.8'
14'	12.2	11.5'
16'	9.3	13.1'

Beam: 45°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Flood
CBCP / Lumens	2,387	/ 1,569
Watts	120V	277V
	23.15W	23.65W
Operating AMPS	0.19A	0.085A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	67.9	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 606978	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	106	103	101	99	99	97
	4	96	92	93	90	91	88
	6	88	83	85	82	84	81
	8	79	75	78	74	77	73
	10	72	67	71	67	70	66

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,168	74.42%
0-40	1,462	93.15%
0-60	1,562	99.55%
60-90	7	0.45%
0-90	1,569	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	76	1.02
6'	43	0.58
7'	30	0.4
8'	30	0.4
9'	19	0.26

Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,387	45	114
5	2,324	55	6
10	2,138	65	4
15	1,818	75	2
20	1,411	85	0
25	968	90	0
35	476		



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LD3B MODEL PHOTOMETRIC DATA

With performance 1 housing

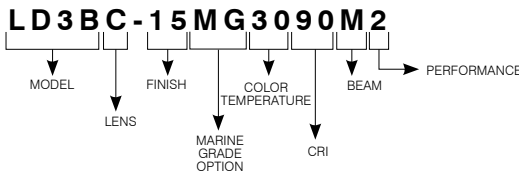
	Narrow Flood		Flood	
2,700K with 80 CRI	1,106 Lms	70.9 lm/W	1,000 Lms	63.7 lm/W
3,000K with 90 CRI	933 Lms	59 lm/W	862.2 Lms	54.3 lm/W
3,500K with 80 CRI	1,239 Lms	79 lm/W	1,153 Lms	73.4 lm/W
4,000K with 80 CRI	1,189 Lms	75.2 lm/W	1,256 Lms	79.5 lm/W

With performance 2 housing

	Narrow Flood		Flood	
2,700K with 80 CRI	1,780 Lms	82.8 lm/W	1,610 Lms	71.2 lm/W
3,000K with 90 CRI	1,230 Lms	54.7 lm/W	1,287 Lms	56.9 lm/W
3,500K with 80 CRI	1,625 Lms	75.6 lm/W	1,662 Lms	77.3 lm/W
4,000K with 80 CRI	1,603 Lms	70.6 lm/W	1,739 Lms	76.3 lm/W

* All .ies files are available on our Website.

CODIFICATION EXAMPLE



ORDERING CODES

MODEL	LENSES	TRIM FINISHES	MARINE GRADE	COLOR TEMPERATURES	CRI	BEAMS	PERFORMANCE
LD3B							2
LD3B	C Clear	-01 White	MG (optional)	27 2,700K	80 80+ CRI	M Narrow Flood (27°)	Use with Performance 1 or Performance 2 Housings
	F Frosted	-02 Black	May be applied on	30 3,000K	90 90+ CRI	W Flood (47°)	
	H Honeycomb	-03 24K Gold Plated	finishes: -01, -02,	35 3,500K	(only with 3,000K)		
	L Linear	-04 Chrome	-05, -06, -11 and	40 4,000K			
	P Prismatic	-04BR Brushed Chrome	-15.				
	S Solite	-05 Architectural Bronze					
		-06 Antique Copper					
		-11 Matte White					
		-12BR Brushed Nickel					
		-13 Satin Nickel					
		-15 Metallic Grey					

For future on site modification of the light distribution.

Ordering codes: replacement lenses.

Lenses (to modify light diffusion)

Linear: **103092** Honeycomb: **103089**
 Solite: **103098** Frosted: **316228**
 Prismatic: **103095** Clear: **103584**

Reflectors (to modify the beam angle)

For a Narrow Flood: **316082**
 For a Flood: **316211**

MARINE GRADE

2-year warranty on finish

This option increases the painted finishes resistance by reducing and delaying apparition and propagation of oxidation (ex: rust and others).

MARINE GRADE treatment is recommended for damp to wet locations.

Unless otherwise indicated, trims are for interior use. Also suitable for cold and exterior locations, as in soffits, where fixtures are not subject to direct rain or snow exposure.

WARNING – This option is not suitable for salt environments and/or highly corrosive areas such as soffits in coastal regions and natatoriums.

Such usage would void warranty on the product.

