

Concerto LED - LD2E

4" Series

Low Profile Square Adjustable Regressed Trim

DESCRIPTION

This series of adjustable round or square trims, offers a reflector and recessed lamp for a more discreet ambient lighting and visual comfort.

SPECIFICATIONS

COLOR TEMPERATURES	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: 1,070 lumens, 69 lm/W Performance 2: 1,485 lumens, 65 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 → 48°		
AJUSTABILITY	Swivel: 360° 40° tilt and with locking position. Choose aiming angle then tighten screws to lock into position.		
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation.		
REFLECTORS	Anodized Anodized Aluminum (AN) Specular Specular (SP)	Painted White (01)* Antique Copper (06)* Black (02) Matte White (11)* Architectural Bronze (05)* Metallic Grey (15)*	
*These reflector colors are available only with the same trim color.			
CEILING CUTOUT	Ø 4-1/4" (108 mm)		
COMPATIBLE HOUSINGS	Remodel Housing Performance 1 (1,500 lumens) Performance 2 (2,000 lumens)	New Construction Housing RELD200LD1 RELD200LA1 RELD200LE2 RELD200LD2 RELD200LA2	Insulated Housing NWLD200LD1 NWLD200LA1 NWLD200LE2 NWLD200LD2 NWLD200LA2 ISLD200LD1 ISLD200LA1 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 _____

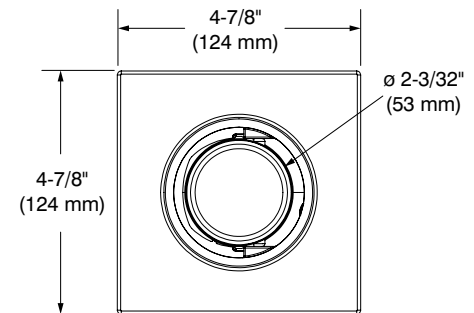
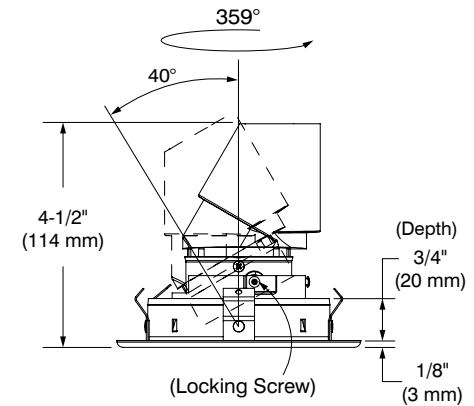
Notes _____

Fixture Type _____

Date _____



LD2EC-06SP (illustrated)



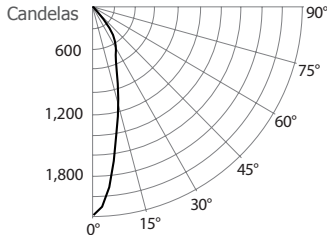
Concerto LED - LD2E

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	59.9	2.9'
08'	33.7	3.9'
10'	21.6	4.9'
12'	15.0	5.9'
14'	11.0	6.8'
16'	8.4	7.8'

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

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBCP / Lumens	2,157	/ 928
Watts	120V	277V
	15.9W	16.4W
Operating AMPS	0.13A	0.058A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	58	
Spacing Criteria	0.4	
Certificate LM79-08	Based on test 475807	

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	107	104	102	100	99	97
	4	97	93	94	90	92	89
	6	88	84	86	83	85	82
	8	80	76	79	75	78	74
	10	73	69	72	68	71	68

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	691	74.43%
0-40	898	96.78%
0-60	927	99.88%
60-90	1	0.12%
0-90	928	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	45	0.7
6'	25	0.4
7'	18	0.28
8'	18	0.28
9'	11	0.18

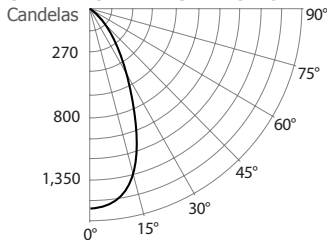
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,157	45	12
5	1,879	55	1
10	1,356	65	1
15	987	75	0
20	700	85	0
25	547	90	0
35	354		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	42.1	5.3
08'	23.7	7.1
10'	15.2	8.9
12'	10.5	10.7
14'	7.7	12.5
16'	5.9	14.3

Beam: 48°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Flood
CBCP / Lumens	1,515	/ 1,062
Watts	120V	277V
	15.5W	16W
Operating AMPS	0.13A	0.057A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	69	
Spacing Criteria	0.8	
Certificate LM79-08	Based on test 475809	

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	107	104	102	99	99	97
	4	97	93	94	90	92	89
	6	88	84	86	82	85	82
	8	80	76	79	75	78	74
	10	73	69	72	68	71	68

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	811	76.30%
0-40	1,025	96.50%
0-60	1,059	99.60%
60-90	4	0.40%
0-90	1,062	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	52	0.69
6'	29	0.39
7'	20	0.27
8'	20	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	1,515	45	14
5	1,485	55	2
10	1,396	65	2
15	1,250	75	1
20	1,015	85	1
25	700	90	0
35	358		

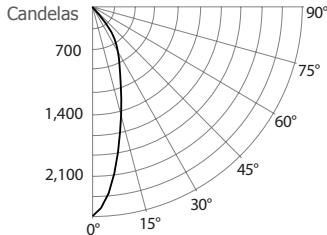
Concerto LED - LD2E

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	68.6	3.5'
08'	38.6	4.6'
10'	24.7	5.8'
12'	17.2	6.9'
14'	12.6	8.1'
16'	9.7	9.2'

Beam: 32°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	2,471	/ 1,247
Watts	120V	277V
	23.1W	23.6W
Operating AMPS	0.19A	0.085A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	54	
Spacing Criteria	0.5	
Certificate LM79-08	Based on test 606972	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	50
RCR	0	119	119	111	111	106	106	106	106
	2	107	103	101	99	99	97	97	97
	4	96	92	93	90	91	89	89	89
	6	88	83	86	82	84	81	81	81
	8	79	75	78	74	77	73	73	73
	10	72	67	71	67	70	66	66	66

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	914	73.29%
0-40	1,190	95.42%
0-60	1,246	99.92%
60-90	1	0.08%
0-90	1,247	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	61	1.02
6'	34	0.58
7'	24	0.4
8'	24	0.4
9'	15	0.26

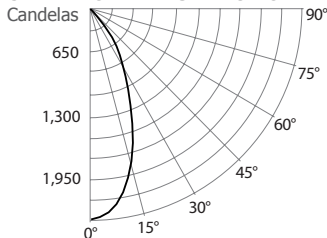
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,471	45	39
5	2,211	55	1
10	1,747	65	2
15	1,313	75	0
20	986	85	0
25	763	90	0
35	459		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	64.6	4.9'
08'	36.3	6.6'
10'	23.2	8.2'
12'	16.1	9.9'
14'	11.9	11.5'
16'	9.1	13.2'

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

LUMINAIRE

Performance 2 LED	3,000K	Flood
CBCP / Lumens	2,324	/ 1,484
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.084A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	64	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 606974	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	50
RCR	0	119	119	111	111	106	106	106	106
	2	107	104	102	100	99	97	97	97
	4	97	93	94	91	92	89	89	89
	6	89	84	87	83	85	82	82	82
	8	81	76	79	75	78	75	75	75
	10	74	69	72	68	72	68	68	68

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,139	76.76%
0-40	1,439	96.94%
0-60	1,484	99.95%
60-90	1	0.05%
0-90	1,484	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	72	1.02
6'	41	0.58
7'	28	0.4
8'	28	0.4
9'	18	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	2,324	45	20
5	2,255	55	1
10	2,058	65	1
15	1,743	75	0
20	1,347	85	0
25	980	90	0
35	499		

Concerto LED - LD2E

4" Series

LD2E MODEL PHOTOMETRIC DATA

With performance 1 housing

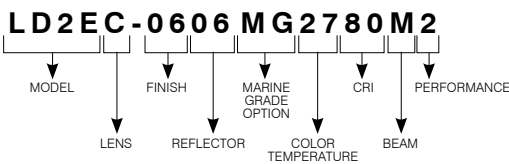
	Narrow Flood		Flood	
2,700K with 80 CRI	1,102 Lms	70.8 lm/W	927 Lms	59 lm/W
3,000K with 90 CRI	806 Lms	51 lm/W	815 Lms	51.6 lm/W
3,500K with 80 CRI	1,047 Lms	66.3 lm/W	1,124 Lms	71.6 lm/W
4,000K with 80 CRI	1,122 Lms	71 lm/W	1,246 Lms	78.6 lm/W

With performance 2 housing

	Narrow Flood		Flood	
2,700K with 80 CRI	1,302 Lms	60.6 lm/W	1,550 Lms	68.9 lm/W
3,000K with 90 CRI	1,061 Lms	49.3 lm/W	1,140 Lms	53 lm/W
3,500K with 80 CRI	1,352 Lms	62.9 lm/W	1,530 Lms	71.2 lm/W
4,000K with 80 CRI	1,454 Lms	64.1 lm/W	1,701 Lms	74.9 lm/W

* All .ies files are available on our Website.

CODIFICATION EXAMPLE



ORDERING CODES

MODEL	LENSES	TRIM FINISHES	REFLECTORS	MARINE GRADE	COLOR TEMPERATURES	CRI	BEAMS	PERFORMANCE
LD2E								2
LD2E	C Clear	-01 White	ANODIZED	MG (optional)	27 2,700K	80 80+ CRI	M Narrow	Use with Performance 1 or Performance 2 Housings
	F Frosted	-02 Black	AN Anodized Aluminum	May be applied on finishes: -01, -02, -05, -06, -11 and -15	30 3,000K	90 90+ CRI	Flood (27°)	
	H Honeycomb	-03 24K Gold Plated	SPECULAR		35 3,500K	(only with 3,000K)	W Flood (48°)	
	L Linear	-04 Chrome	SP Specular		40 4,000K			
	P Prismatic	-04BR Brushed Chrome	PAINTED					
	S Solite	-05 Architectural Bronze	01 White*					
		-06 Antique Copper	02 Black					
		-11 Matte White	05 Architectural Bronze*					
		-12BR Brushed Nickel	06 Antique Copper*					
		-13 Satin Nickel	11 Matte White*					
		-15 Metallic Grey	15 Metallic Grey*					

*These reflector colors are available only with the same trim color.

For future on site modification of the light distribution.

Ordering codes: replacement lenses and reflectors.

Lenses (to modify light diffusion)

Linear: **103092** Honeycomb: **103098**
 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.

