

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 2 dimming options: ELV and 0-10V. Refer to the housing specifications sheet for more details.

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.

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	Painted	
	Anodized Aluminum (AN)	White (01)* Black (02) Architectural Bronze (05)*	Antique Copper (06)* Matte White (11)* Metallic Grey (15)*
	Specular	Specular (SP)	

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

CEILING CUTOUT Ø 4-1/4" (108 mm)

COMPATIBLE HOUSINGS	Remodel Housing	New Construction Housing	Insulated Housing
(Performance 2 trims work with either performance 1 and 2 housings.)	Performance 1 (1,500 lumens)	RELD200LD1 RELD200LV1	NWLD200LD1 NWLD200LV1
	Performance 2 (2,000 lumens)	RELD200LD2 RELD200LV2	NWLD200LD2 NWLD200LV2
			Not Available

For dimming, please refer to the selected housing specification sheet.

CERTIFICATION cULus E343977 for damp locations

WARRANTY 1 year for standard finishes and 5 years on LED module.

Project _____

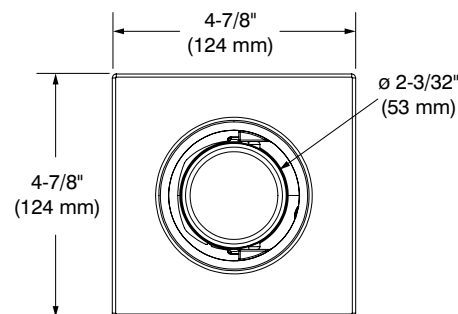
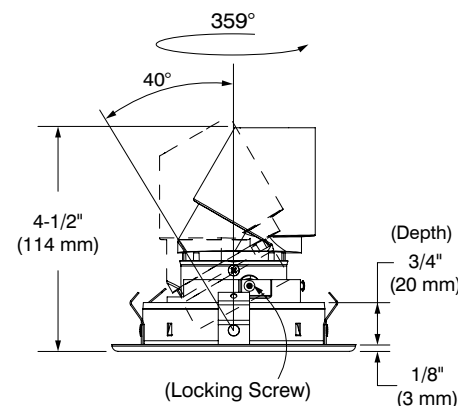
Notes _____

Fixture Type _____

Date _____



LD2EC-06SP (illustrated)



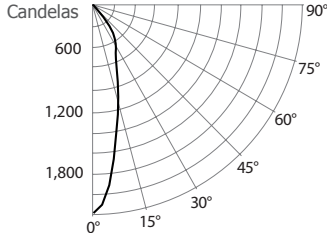
Concerto LED - LD2E

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

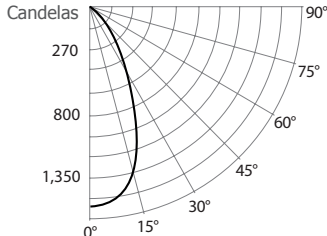
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

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		



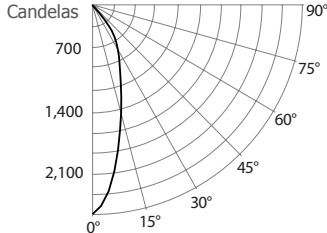
Concerto LED - LD2E

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

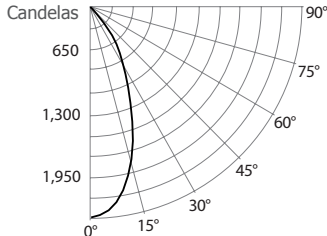
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

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

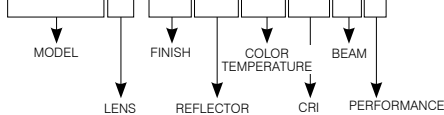
* All .ies files are available on our Website.

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

CODIFICATION EXAMPLE

LD2EC-06062780M2



ORDERING CODES

MODEL	LENSES	TRIM FINISHES	REFLECTORS	COLOR TEMPERATURES	CRI	BEAMS	PERFORMANCE
LD2E							2
LD2E	C Clear	-01 White	ANODIZED	27 2,700K	80 80+ CRI	M Narrow Flood (27°)	Use with Performance 1 or Performance 2 Housings
	F Frosted	-02 Black	AN Anodized Aluminum	30 3,000K	90 90+ CRI	W Flood (48°)	
	H Honeycomb	-03 24K Gold Plated		35 3,500K	(only with 3,000K)		
	L Linear	-04 Chrome	SPECULAR	40 4,000K			
	P Prismatic	-04BR Brushed Chrome	SP Specular				
	S Solite	-05 Architectural Bronze	PAINTED				
		-06 Antique Copper	01 White*				
		-11 Matte White	02 Black				
		-12BR Brushed Nickel	05 Architectural Bronze*				
		-13 Satin Nickel	06 Antique Copper*				
		-15 Metallic Grey	11 Matte White*				
			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: **103089**
 Solite: **103098** Frosted: **316228**
 Prismatic: **103095** Clear: **103584**

Reflectors (to modify the beam angle)

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

