

Concerto LED - LD2K

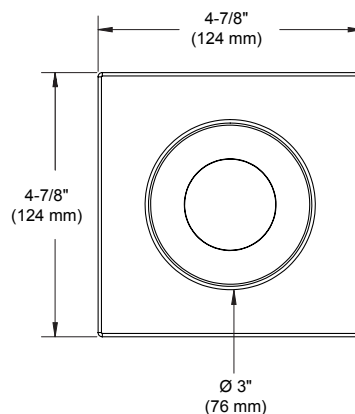
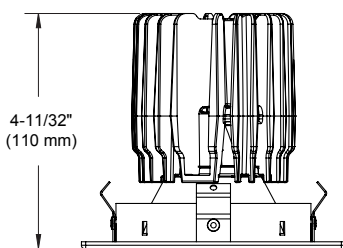
4" Series

Project	
Notes	
Fixture Type	
Date	

Low Profile Square Regressed Trim



LD2KC-04BR
(illustrated)



DESCRIPTION

This series of fixed round or square trims offered with narrow flood or flood beam will be highly appreciated in the following applications: highlight of various objects in shows and museums or for certain tasks such as above a work table, for kids homework, kitchen island, sewing, 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	<p>Bridgelux Vero 18, delivers a lumen maintenance greater than 70% after 50,000 hours of operation (L₇₀). Provides a high quality true color and a clean white light without hot spots. Binning within 3 steps on MacAdam ellipse.</p> <p>CREE CXA2530 delivers a lumen maintenance greater than 70% after 50,000 hours of operation (L₇₀). Provides a high quality true color and a clean white light without hot spots. Binning within 4 steps on MacAdam ellipse.</p> <p>Both modules surpass ANSI binning requirements.</p>		
DELIVERED LUMENS (Determined by the choice of housing)	Performance 1: 1,060 lumens, 66 lm/W	Performance 2: 1,370 lumens, 63 lm/W	Performance 3: 1,850 lumens, 63 lm/W
TRIM	Powder coated paint or plated die-formed steel. Different finishes available. Painted finishes available with Marine Grade option.		
OPTIC SYSTEM	<p>Interchangeable optional optical reflectors and lenses available to personalize your lighting.</p> <p>Protection lens covered with a high-performance film 98% effective.</p> <p>Lens of 1/8" (3 mm) thick and 1.9" (47 mm) Ø.</p> <p>Choice of available lenses: Clear (C), Frosted (F), Honeycombs (H), Linear (L), Prismatic (P) and Solite (S)</p> <p>Optical reflectors available: M: Narrow Flood → 33° W: Flood → 48°</p>		
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation.		

Concerto LED - LD2K

4" Series

SPECIFICATIONS SUITE

REFLECTORS	Anodized	Specular	Painted
	Natural Anodized (AN)	Clear (CL) Black (BK)	White (01)* Black (02) Architectural Bronze (05)* Antique Copper (06)* Matte White (11)* Metallic Grey (15)*

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

CEILING CUTOUT **Ø 4-1/4" (108 mm)**

COMPATIBLE HOUSINGS

(Performance 2 trims work with either performance 1 and 2 housings.)

(Performance 3 trims works only with performance 3 housings.)

	Remodel Housing	New Construction Housing	Insulated Housing
Performance 1 (1,500 lumens)	RELD200LE1 RELD200LD1 RELD200LA1	NWLD200LE1 NWLD200LD1 NWLD200LA1	ISLD200LE1 ISLD200LD1 ISLD200LA1
Performance 2 (2,000 lumens)	RELD200LE2 RELD200LD2 RELD200LA2	NWLD200LE2 NWLD200LD2 NWLD200LA2	ISLD200LE2 ISLD200LD2 ISLD200LA2
Performance 3 (2,500 lumens)	Not Available	NWLD200LD3 NWLD200LA3	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.



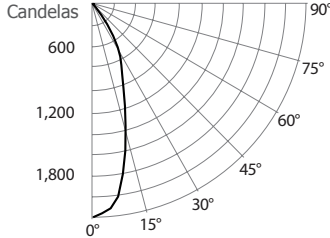
Concerto LED - LD2K

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	59.0	3.8'
08'	33.2	5.1'
10'	21.2	6.3'
12'	14.7	7.6'
14'	10.8	8.9'
16'	8.3	10.1'

Beam: 35°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBCP / Lumens	2,123	/ 1,040
Watts	120V	277V
	15.9W	16.4W
Operating AMPS	0.13A	0.059A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	65	
Spacing Criteria	0.6	
Certificate LM79-08	Based on test 475903	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30			
RCR	0	119	119	111	111	106	106
	2	107	104	102	100	99	97
	4	98	94	95	91	93	90
	6	90	86	88	84	87	84
	8	83	79	82	78	81	77
	10	77	72	76	72	75	71

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	846	81.34%
0-40	1,002	96.41%
0-60	1,025	98.56%
60-90	15	1.44%
0-90	1,040	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	51	0.71
6'	28	0.4
7'	20	0.28
8'	20	0.28
9'	13	0.18

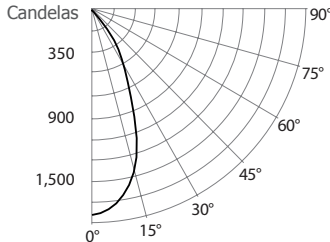
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,123	45	14
5	2,044	55	8
10	1,723	65	5
15	1,265	75	6
20	894	85	6
25	672	90	0
35	250		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	47.8	5.1'
08'	26.9	6.8'
10'	17.2	8.5'
12'	12.0	10.2'
14'	8.8	11.9'
16'	6.7	13.5'

Beam: 46°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Flood
CBCP / Lumens	1,722	/ 1,056
Watts	120V	277V
	16.1W	16.6W
Operating AMPS	0.19A	0.059A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	66	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 475906	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80	50	30				
Wall Reflect %	50	30	50	30			
RCR	0	119	119	111	111	106	106
	2	104	100	99	96	96	94
	4	92	87	89	85	87	83
	6	82	77	80	76	79	75
	8	74	69	73	68	72	68
	10	68	62	66	62	66	61

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	859	81.3%
0-40	1,018	96.3%
0-60	1,042	98.5%
60-90	15	1.5%
0-90	1,056	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	51	0.71
6'	29	0.4
7'	20	0.28
8'	20	0.28
9'	13	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	1,722	45	16
5	1,683	55	8
10	1,544	65	5
15	1,326	75	6
20	1,055	85	6
25	726	90	0
35	254		



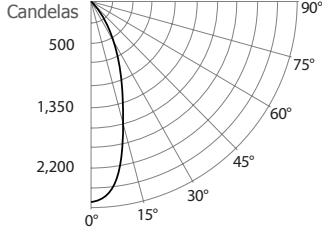
Concerto LED - LD2K

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	72.4	3.8'
08'	40.7	5.1'
10'	26.1	6.4'
12'	18.1	7.7'
14'	13.3	9.0'
16'	10.2	10.2'

Beam: 35°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	2,607	/ 1,278
Watts	120V	277V
	21.5W	22W
Operating AMPS	0.18A	0.079A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	59	
Spacing Criteria	0.6	
Certificate LM79-08	Based on test 475903	

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	104	101	99	97	96	94
	4	93	88	89	85	88	84
	6	83	78	81	77	80	76
	8	75	70	74	69	73	69
	10	69	64	68	63	67	63

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,039	81.3%
0-40	1,232	96.4%
0-60	1,260	98.6%
60-90	18	1.4%
0-90	1,278	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	62	0.71
6'	35	0.4
7'	24	0.28
8'	24	0.28
9'	16	0.18

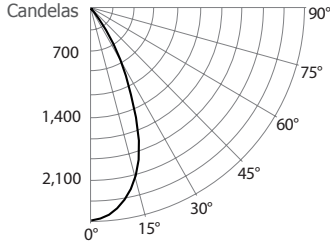
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,607	45	18
5	2,510	55	9
10	2,116	65	6
15	1,554	75	8
20	1,097	85	7
25	825	90	0
35	307		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	60.8	5.3'
08'	34.2	7.1'
10'	21.9	8.8'
12'	15.2	10.6'
14'	11.2	12.4'
16'	8.5	14.1'

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

LUMINAIRE

Performance 2 LED	3,000K	Flood
CBCP / Lumens	2,187	/ 1,370
Watts	120V	277V
	21.5W	22W
Operating AMPS	0.18A	0.079A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	63.4	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 475915	

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	98	94	95	92	93	90
	6	90	86	88	85	87	84
	8	83	79	82	78	81	78
	10	77	73	76	72	76	72

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,144	83.52%
0-40	1,322	96.51%
0-60	1,348	98.40%
60-90	22	1.60%
0-90	1,370	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	67	0.96
6'	37	0.54
7'	26	0.37
8'	26	0.37
9'	17	0.24

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	2,187	45	17
5	2,138	55	10
10	2,006	65	6
15	1,790	75	9
20	1,453	85	7
25	982	90	0
35	274		



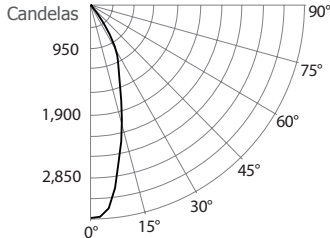
Concerto LED - LD2K

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	94.7	3.6'
08'	53.3	4.8'
10'	34.1	6.0'
12'	23.7	7.2'
14'	17.4	8.4'
16'	13.3	9.6'

Beam: 33°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 3 LED	3,000K	Narrow Flood
CBCP / Lumens	3,409	/ 1,566
Watts	120V	277V
	29.2W	29.7W
Operating AMPS	0.24A	0.107A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	53.6	
Spacing Criteria	0.5	
Certificate LM79-08	Based on test 607002	

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	98
	4	98	94	95	92	93	90
	6	91	86	88	85	87	84
	8	84	79	82	78	81	78
	10	77	73	76	72	76	72

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,287	82.22%
0-40	1,512	96.58%
0-60	1,544	98.62%
60-90	22	1.38%
0-90	1,566	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	76	1.29
6'	43	0.73
7'	30	0.51
8'	30	0.51
9'	19	0.32

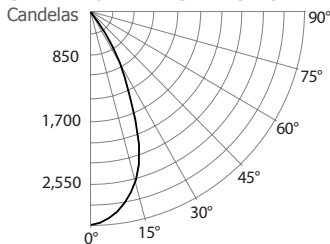
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	3,409	45	22
5	3,272	55	11
10	2,549	65	8
15	1,912	75	9
20	1,352	85	8
25	1,030	90	0
35	355		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	83.8	5.2'
08'	47.1	7.0'
10'	30.2	8.7'
12'	20.9	10.4'
14'	15.4	12.2'
16'	11.8	13.9'

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

LUMINAIRE

Performance 3 LED	3,000K	Flood
CBCP / Lumens	3,016	/ 1,842
Watts	120V	277V
	29.28W	29.78W
Operating AMPS	0.25A	0.107A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	62.9	
Spacing Criteria	0.7	
Certificate LM79-08	Based on test 607004	

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	98
	4	98	94	95	92	94	91
	6	91	87	89	86	88	85
	8	84	80	83	79	82	78
	10	78	74	77	73	76	73

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,558	84.61%
0-40	1,792	97.31%
0-60	1,821	98.88%
60-90	21	1.12%
0-90	1,842	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	90	1.3
6'	50	0.73
7'	35	0.51
8'	35	0.51
9'	22	0.32

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	3,016	45	20
5	2,933	55	11
10	2,749	65	7
15	2,464	75	8
20	1,996	85	8
25	1,300	90	0
35	361		

Concerto LED - LD2K

4" Series

LD2K MODEL PHOTOMETRIC DATA

With performance 1 housing

	Narrow Flood		Flood	
	Lms	lm/W	Lms	lm/W
2,700K with 80 CRI	985.9	61.4	966	61.5
3,000K with 90 CRI	832	53	745	46.3
3,500K with 80 CRI	1,102	70.2	1,141	72.6
4,000K with 80 CRI	1,123	71.5	1,139	70.3

With performance 2 housing

	Narrow Flood		Flood	
	Lms	lm/W	Lms	lm/W
2,700K with 80 CRI	1,284	59.7	1,260	58.6
3,000K with 90 CRI	947	41.2	1,097	49.6
3,500K with 80 CRI	1,359	62.9	1,452	67.5
4,000K with 80 CRI	1,516	66.2	1,480	68.8

With performance 3 housing

	Narrow Flood		Flood	
	Lms	lm/W	Lms	lm/W
2,700K with 80 CRI	1,760	60.7	1,728	58.8
3,000K with 90 CRI	1,183	40.5	1,465	50
3,500K with 80 CRI	1,359	46.9	1,763	60.8
4,000K with 80 CRI	1,517	51.6	1,797	61.1

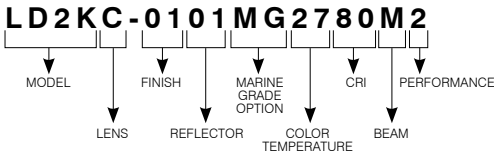
* All .ies files are available on our Website.



Concerto LED - LD2K

4" Series

CODIFICATION EXAMPLE



ORDERING CODE

MODEL	LENS	FINISH	REFLECTOR	MARINE GRADE	COLOR TEMPERATURE	CRI	BEAM	PERFORMANCE
LD2K								
LD2K	C Clear	-01 White	ANODIZED	MG (optional)	27 2,700K	80 80+ CRI	M Narrow	-2
	F Frosted	-02 Black	AN Natural Anodized	May be applied on finishes: -01, -02, -05, -06, -11 and -15	30 3,000K	90 90+ CRI	Flood (33°)	
	H Honeycombs	-03 Gold Plated 24K	SPECULAR		35 3,500K	(only with 3,000K)	W Flood (48°)	3 Performance 3 (2,500 lumens)
	L Linear	-04 Chrome		CL Clear			40 4,000K	
	P Prismatic	-04BR Brushed Chrome	BK Black					
	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*					
		-17 Antique Nickel	15 Metallic Grey*					

Use with Performance 1 (1,500 lumens) or Performance 2 (2,000 lumens) Housings

*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 the light diffusion)

Linear: **103091** Honeycombs: **103089**
 Solite: **103097** Frosted: **313206**
 Prismatic: **103094** Clear: **102958**

Reflectors (to modify the beam angle)

For a Narrow Flood: **316082**
 For a Flood: **316083**

MARINE GRADE - Unless otherwise indicated, trims are for interior, cold and exterior locations where fixtures are not subject to direct rain or snow exposure as in soffits. **MARINE GRADE** treatment is recommended for exterior, shower and high salinity environment.

