

# Concerto LED - LD3C

## 3-1/2" Series

### Low Profile Round Shower Trim

Project	
Notes	
Fixture Type	
Date	

#### DESCRIPTION

This series round or square trims, wide beam and frosted lens, illuminates almost entirely confined space such as a shower.

#### 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)	<b>Performance 1:</b> 860 lumens, 55 lm/W <b>Performance 2:</b> 1,205 lumens, 53 lm/W
TRIM	Powder coated paint or plated die-formed steel. Different finishes available. Painted finishes available with Marine Grade option.
BEAM	<b>W:</b> Flood $\rightarrow$ 51°
LENS	<b>Choice of lenses available:</b> Clear (C), Frosted (F), Frosted with clear center (FC)
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation.
CEILING CUTOUT	<b>Ø 3-5/8" (92 mm)</b>

COMPATIBLE HOUSINGS	Remodel Housing	New Construction Housing	Insulated Housing	
(Performance 2 trims work with either performance 1 and 2 housings.)	<b>Performance 1</b> (1,500 lumens)	RELD300LE1 RELD300LD1 RELD300LA1	NWLD300LE1 NWLD300LD1 NWLD300LA1	ISLD300LE1 ISLD300LD1 ISLD300LA1
	<b>Performance 2</b> (2,000 lumens)	RELD300LE2 RELD300LD2 RELD300LA2	NWLD300LE2 NWLD300LD2 NWLD300LA2	ISLD300LE2 ISLD300LD2 ISLD300LA2

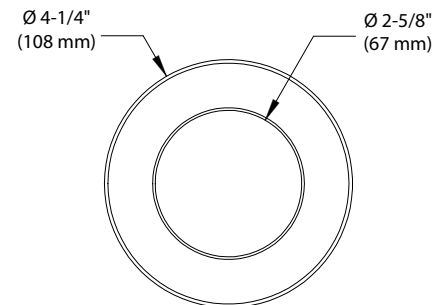
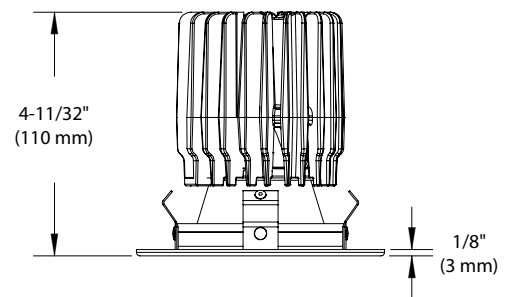
For dimming, please refer to the selected housing specification sheet.

CERTIFICATION	• cULus <b>E343977</b> for <b>wet locations</b>
---------------	---

WARRANTY	1 year for standard finishes, 2 years on "Marine Grade" finish and 5 years on LED module.
----------	---



LD3CF-04BR (illustrated)



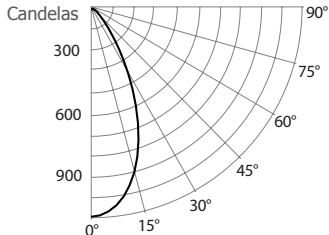
# Concerto LED - LD3C

3-1/2" Series

## PHOTOMETRIC DATA

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	27.2	5.7'
08'	15.3	7.6'
10'	9.8	9.5'
12'	6.8	11.4'
14'	5.0	13.3'
16'	3.8	15.2'

Beam: 51°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 1 LED	3,000K Flood	
CBCP / Lumens	979	/ 859
Watts	120V	277V
	15.59W	16.09W
Operating AMPS	0.13A	0.058A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	55	
Spacing Criteria	0.8	
Certificate LM79-08	Based on test 475837	

#### 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	103	99	98	95	95	92	92	
	4	90	85	87	83	85	81	81	
	6	80	74	78	73	76	72	72	
	8	71	65	69	64	68	64	64	
	10	64	58	62	57	62	57	57	

#### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	539	62.69%
0-40	687	79.97%
0-60	809	94.18%
60-90	50	5.82%
0-90	859	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	40	0.69
6'	23	0.39
7'	16	0.27
8'	16	0.27
9'	10	0.17

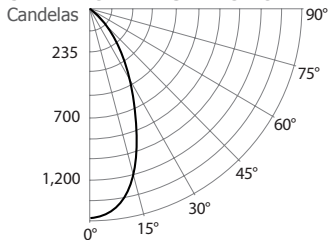
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).  
Reflection factor of 80%/50%/30%.

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	979	45	98
5	958	55	49
10	897	65	28
15	796	75	15
20	659	85	7
25	504	90	0
35	235		

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	38.1	5.7'
08'	21.4	7.6'
10'	13.7	9.5'
12'	9.5	11.4'
14'	7.0	13.4'
16'	5.4	15.3'

Beam: 51°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 2 LED	3,000K Flood	
CBCP / Lumens	1,370	/ 1,204
Watts	120V	277V
	22.6W	23.1W
Operating AMPS	0.19A	0.083A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	80 +	
Lumens/Watt	53	
Spacing Criteria	0.8	
Certificate LM79-08	Base on test 475837	

#### 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	100	95	95	91	92	89	89	
	4	85	79	82	77	80	76	76	
	6	74	68	72	66	70	65	65	
	8	65	59	64	58	62	57	57	
	10	58	52	57	51	56	51	51	

#### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	754	62.6%
0-40	963	79.9%
0-60	1,134	94.2%
60-90	70	5.8%
0-90	1,204	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	56	0.69
6'	32	0.39
7'	22	0.27
8'	22	0.27
9'	14	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	1,370	45	137
5	1,341	55	68
10	1,256	65	39
15	1,114	75	21
20	923	85	10
25	706	90	0
35	328		

# Concerto LED - LD3C

## 3-1/2" Series

### LD3C MODEL PHOTOMETRIC DATA

#### With performance 1 housing

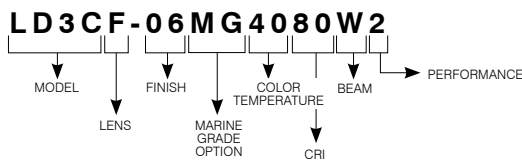
	Flood	
<b>2,700K with 80 CRI</b>	913.6 Lms	57.2 lm/W
<b>3,000K with 90 CRI</b>	715.4 Lms	44.6 lm/W
<b>3,500K with 80 CRI</b>	1,004 Lms	63.1 lm/W
<b>4,000K with 80 CRI</b>	1,023 Lms	65.2 lm/W

#### With performance 2 housing

	Flood	
<b>2,700K with 80 CRI</b>	1,128 Lms	51.3 lm/W
<b>3,000K with 90 CRI</b>	942 Lms	42.8 lm/W
<b>3,500K with 80 CRI</b>	1,270 Lms	58.1 lm/W
<b>4,000K with 80 CRI</b>	1,294 Lms	60.2 lm/W

\* All .ies files are available on our Website.

### CODIFICATION EXAMPLE



### ORDERING CODE

MODEL	LENS	FINISH	MARINE GRADE	COLOR TEMPERATURE	CRI	BEAM	PERFORMANCE
<b>LD3C</b>						<b>W</b>	<b>2</b>
<b>LD3C</b>	<b>F</b> Frosted	<b>-01</b> White	<b>MG (optional)</b>	<b>27</b> 2,700K	<b>80</b> 80+ CRI	<b>W</b> Flood (51°)	<b>2</b>
	<b>FC</b> Frosted with clear center	<b>-02</b> Black	May be applied on finishes: -01, -02, -05, -06, -11 and -15.	<b>30</b> 3,000K	<b>90</b> 90+ CRI		
	<b>C</b> Clear	<b>-03</b> Gold Plated 24K		<b>35</b> 3,500K	(only with 3,000K)	Use with Performance 1 (1,500 lumens) or Performance 2 (2,000 lumens) Housings	
		<b>-04</b> Chrome		<b>40</b> 4,000K			
		<b>-04BR</b> Brushed Chrome					
		<b>-05</b> Architectural Bronze					
		<b>-06</b> Antique Copper					
		<b>-11</b> Matte White					
		<b>-12BR</b> Brushed Nickel					
		<b>-13</b> Satin Nickel					
		<b>-15</b> Metallic Grey					
		<b>-17</b> Antique Nickel					

**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.

