

Concerto LED - LD2F

4" Series

Low Profile Square Shower Trim

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)	Performance 1: 860 lumens, 55 lm/W Performance 2: 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	W: Flood \rightarrow 51°																										
LENS	Choice of lenses available: Clear (C), Frosted (F), Frosted with clear center (FC)																										
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation.																										
CEILING CUTOUT	Ø 4-1/4" (108 mm)																										
COMPATIBLE HOUSINGS	<table border="1"> <thead> <tr> <th></th> <th>Remodel Housing</th> <th>New Construction Housing</th> <th>Insulated Housing</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Performance 1 (1,500 lumens)</td> <td>RELD200LE1</td> <td>NWLD200LE1</td> <td>ISLD200LE1</td> </tr> <tr> <td>RELD200LD1</td> <td>NWLD200LD1</td> <td>ISLD200LD1</td> </tr> <tr> <td>RELD200LA1</td> <td>NWLD200LA1</td> <td>ISLD200LA1</td> </tr> <tr> <td rowspan="3">Performance 2 (2,000 lumens)</td> <td>RELD200LE2</td> <td>NWLD200LE2</td> <td>ISLD200LE2</td> </tr> <tr> <td>RELD200LD2</td> <td>NWLD200LD2</td> <td>ISLD200LD2</td> </tr> <tr> <td>RELD200LA2</td> <td>NWLD200LA2</td> <td>ISLD200LA2</td> </tr> </tbody> </table>		Remodel Housing	New Construction Housing	Insulated Housing	Performance 1 (1,500 lumens)	RELD200LE1	NWLD200LE1	ISLD200LE1	RELD200LD1	NWLD200LD1	ISLD200LD1	RELD200LA1	NWLD200LA1	ISLD200LA1	Performance 2 (2,000 lumens)	RELD200LE2	NWLD200LE2	ISLD200LE2	RELD200LD2	NWLD200LD2	ISLD200LD2	RELD200LA2	NWLD200LA2	ISLD200LA2	(Performance 2 trims work with either performance 1 and 2 housings.)	
	Remodel Housing	New Construction Housing	Insulated Housing																								
Performance 1 (1,500 lumens)	RELD200LE1	NWLD200LE1	ISLD200LE1																								
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Performance 2 (2,000 lumens)	RELD200LE2	NWLD200LE2	ISLD200LE2																								
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	For dimming, please refer to the selected housing specification sheet.																										
CERTIFICATION	cULus E343977 for wet locations																										
WARRANTY	1 year for standard finishes, 2 years on "Marine Grade" finish and 5 years on LED module.																										

Project _____

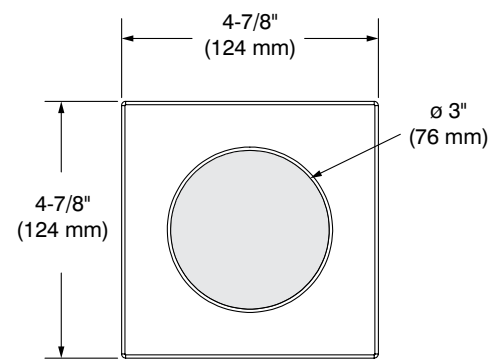
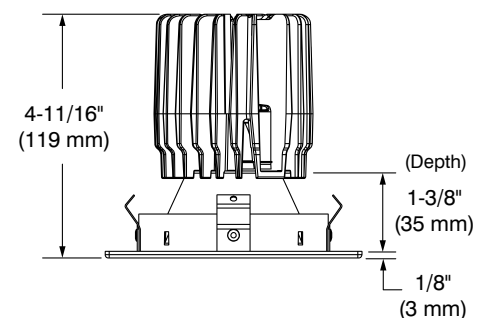
Notes _____

Fixture Type _____

Date _____



LD2FF-11
(illustrated)



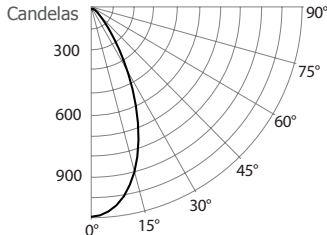
Concerto LED - LD2F

4" 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

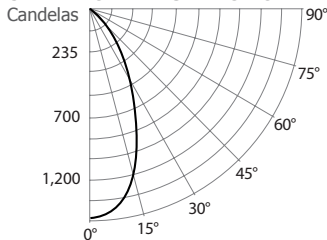
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

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
	15.6W	16.1W
Operating AMPS	0.19A	0.058A
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 - LD2F

4" Series

LD2F MODEL PHOTOMETRIC DATA

With performance 1 housing

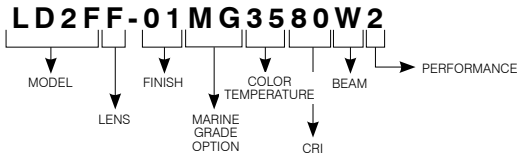
	Flood	
2,700K with 80 CRI	806 Lms	51 lm/W
3,000K with 90 CRI	688.4 Lms	43.2 lm/W
3,500K with 80 CRI	894.3 Lms	56.7 lm/W
4,000K with 80 CRI	948.8 Lms	59.3 lm/W

With performance 2 housing

	Flood	
2,700K with 80 CRI	1,128 Lms	52.5 lm/W
3,000K with 90 CRI	944 Lms	43.9 lm/W
3,500K with 80 CRI	1,232 Lms	57.3 lm/W
4,000K with 80 CRI	1,317 Lms	61.3 lm/W

* All .ies files are available on our Website.

CODIFICATION EXAMPLE



ORDERING CODES

MODEL	LENSES	TRIM FINISHES	MARINE GRADE	COLOR TEMPERATURES	CRI	BEAM	PERFORMANCE
LD2F						W	2
LD2F	F Frosted	-01 White	MG (optional)	27 2,700K	80 80+ CRI	W Flood (51°)	2
	FC Frosted with clear center	-02 Black	May be applied on finishes: -01, -02, -05, -06, -11 and -15.	30 3,000K	90 90+ CRI	Use with Performance 1 (1,500 lumens) or Performance 2 (2,000 lumens) Housings	
	C Clear	-03 24K Gold Plated		35 3,500K	(only with 3,000K)		
		-04 Chrome		40 4,000K			
		-04BR Brushed Chrome					
		-05 Architectural Bronze					
		-06 Antique Copper					
		-11 Matte White					
		-12BR Brushed Nickel					
		-13 Satin Nickel					
		-15 Metallic Grey					

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.

