

# Concerto LED - LD3H

## 3-1/2" Series

### Low Profile Square Shower Trim

Project	
Notes	
Fixture Type	
Date	

#### DESCRIPTION

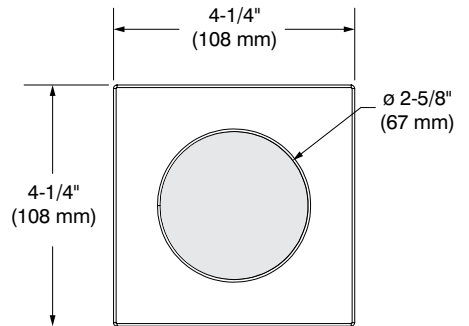
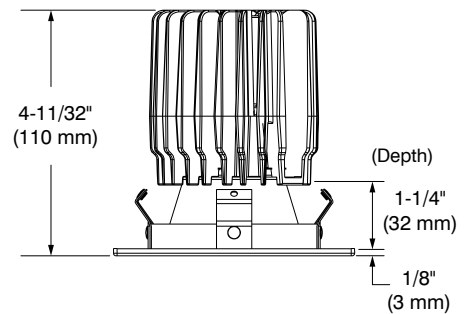
This series round or square trims, wide beam and frosted lens, illuminates almost entirely confined space such as a shower.

#### SPECIFICATIONS

COLOR 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 <sub>70</sub> ). 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> 870 lumens, 55 lm/W <b>Performance 2:</b> 1,150 lumens, 53 lm/W			
TRIM	Powder coated paint or plated die-formed steel. Different finishes available.			
BEAM	<b>W:</b> Flood → 42°			
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	ø 3-5/8" (92 mm)			
COMPATIBLE HOUSINGS	<b>Remodel Housing</b>	<b>New Construction Housing</b>	<b>Insulated Housing</b>	
(Performance 2 trims work with either performance 1 and 2 housings.)	<b>Performance 1</b> (1,500 lumens)	RELD300LD1 RELD300LV1	NWLD300LD1 NWLD300LV1	ISLD300LD1 ISLD300LV1
	<b>Performance 2</b> (2,000 lumens)	RELD300LD2 RELD300LV2	NWLD300LD2 NWLD300LV2	ISLD300LD2 ISLD300LV2
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 finished and 5 years on LED module.			



LD3HF-06 (illustrated)



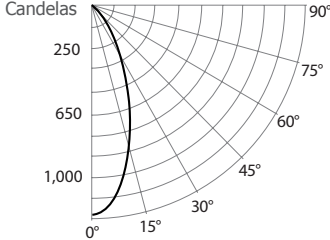
# Concerto LED - LD3H

3-1/2" Series

## PHOTOMETRIC DATA

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	35.2	4.6'
08'	19.8	6.1'
10'	12.7	7.6'
12'	8.8	9.1'
14'	6.5	10.7'
16'	5.0	12.2'

Beam: 42°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 1 LED	3,000K Flood	
<b>CBCP / Lumens</b>	1,268	/ 866
<b>Watts</b>	120V	277V
	15.7W	16.2W
<b>Operating AMPS</b>	0.13A	0.058A
<b>Lumen Maintenance</b>	L70 @ 50,000 Hrs	
<b>CRI</b>	80 +	
<b>Lumens/Watt</b>	55	
<b>Spacing Criteria</b>	0.7	
<b>Certificate LM79-08</b>	475927	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
<b>RCR</b>	0	119	119	111	111	106	106
	2	104	100	98	96	96	93
	4	92	87	88	84	86	83
	6	82	76	80	75	78	74
	8	73	68	72	67	71	66
	10	66	61	65	60	64	60

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	571	65.92%
0-40	710	82.02%
0-60	827	95.52%
60-90	39	4.48%
0-90	866	100%

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

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	41	0.7
6'	23	0.39
7'	16	0.27
8'	16	0.27
9'	10	0.17

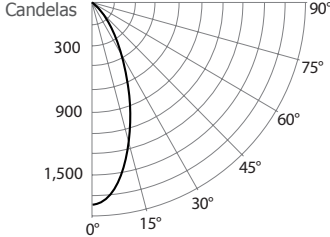
Local 38' x 38' x 10'. Workplane located 2 1/2' (30").  
Reflection factor of 80%/50%/30%

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,268	45	94
5	1,211	55	47
10	1,062	65	25
15	867	75	11
20	666	85	2
25	482	90	0
35	220		

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	46.9	4.6'
08'	26.4	6.1'
10'	16.9	7.6'
12'	11.7	9.1'
14'	8.6	10.7'
16'	6.6	12.2'

Beam: 42°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 2 LED	3,000K Flood	
<b>CBCP / Lumens</b>	1,690	/ 1,146
<b>Watts</b>	120V	277V
	21.5W	22.0W
<b>Operating AMPS</b>	0.18A	0.079A
<b>Lumen Maintenance</b>	L70 @ 50,000 Hrs	
<b>CRI</b>	+ 80	
<b>Lumens/Watt</b>	53	
<b>Spacing Criteria</b>	0.7	
<b>Certificate LM79-08</b>	475935	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
<b>RCR</b>	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	68	72	67	71	67
	10	66	61	65	60	65	60

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	761	66.40%
0-40	946	82.56%
0-60	1,099	95.85%
60-90	48	4.15%
0-90	1,146	100%

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

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	55	0.96
6'	31	0.54
7'	22	0.37
8'	22	0.37
9'	14	0.24

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

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,690	45	123
5	1,613	55	60
10	1,415	65	32
15	1,154	75	13
20	887	85	1
25	645	90	0
35	292		



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### LD3H 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

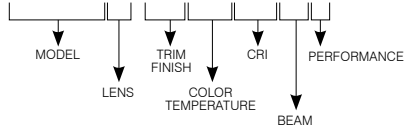
#### With performance 2 housing

	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 and Lighting facts files are available on our Website.

### CODIFICATION EXAMPLE

**LD3HF-112780W2**



### ORDERING CODES

MODEL	LENSES	TRIM FINISHES	COLOR TEMPERATURES	CRI	BEAM	PERFORMANCE
<b>LD3H</b>					<b>W</b>	<b>2</b>
<b>LD3H</b>	<b>F</b> Frosted	<b>-01</b> White	<b>27</b> 2,700K	<b>80</b> 80+ CRI	<b>W</b> Flood (42°)	Use with Performance 1 or Performance 2 Housings
	<b>FC</b> Frosted with clear center	<b>-02</b> Black	<b>30</b> 3,000K	<b>90</b> 90+ CRI		
		<b>-03</b> 24K Gold Plated	<b>35</b> 3,500K	 (only with 3,000K)		
	<b>C</b> Clear	<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				

