

Concerto LED - LD2F

4" Series

Low Profile Square Shower Trim

| | |
|--------------|--|
| Project | |
| Notes | |
| Fixture Type | |
| Date | |

DESCRIPTION

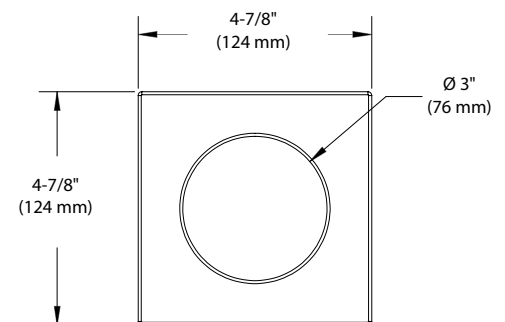
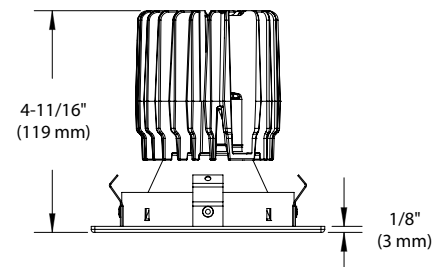
This series round or square trims, wide beam and frosted lens, illuminates almost entirely confined space such as a shower.

SPECIFICATIONS

| | | | |
|--|--|--|--|
| COLOR 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 → 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 | | Remodel Housing | New Construction Housing |
| (Performance 2 trims work with either performance 1 and 2 housings.) | Performance 1 (1,500 lumens) | RELD200LE1 RELD200LD1 RELD200LA1 | NWLD200LE1 NWLD200LD1 NWLD200LA1 |
| | Performance 2 (2,000 lumens) | RELD200LE2 RELD200LD2 RELD200LA2 | NWLD200LE2 NWLD200LD2 NWLD200LA2 |
| | | | Insulated Housing |
| | | | ISLD200LE1 ISLD200LD1 ISLD200LA1 |
| | | | ISLD200LE2 ISLD200LD2 ISLD200LA2 |
| | 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. | | |



LD2FF-13
(illustrated)



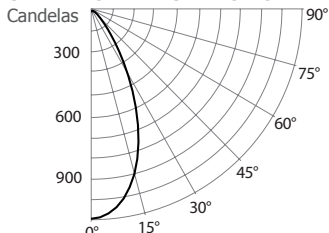
Concerto LED - LD2F

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 |

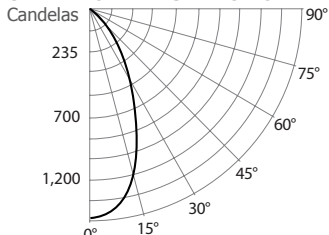
Local 38' x 38' x 10'. Workplan located 2 1/2' (30").
Reflection factor of 80%/50%/30%.

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 |

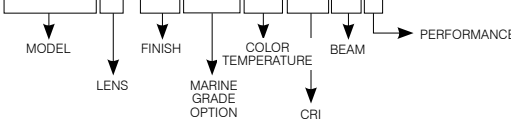
With performance 2 housing

| | 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

LD2FF-01MG3580W2



ORDERING CODE

| MODEL | LENS | FINISH | MARINE GRADE | COLOR TEMPERATURE | 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 | |
| | -03 Gold Plated 24K | | | 35 3,500K | (only with 3,000K) | | |
| | C Clear | -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 | | | | | |
| | | -17 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.

