

# Concerto LED - LD2B

## 4" Series

### Low Profile Square Adjustable Trim

#### DESCRIPTION

The adjustable round or square trims, will provide a maximum accent lighting that will be useful in various applications such as the library, kitchen, corridor, etc...

#### SPECIFICATIONS

|                    |   |
|--------------------|---|
| COLOR TEMPERATURES | 2,700K, 3,000K, 3,500K and 4,000K   |
| CRI                | 80 +<br>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:** 1,100 lumens, 70 lm/W  
**Performance 2:** 1,575 lumens, 68 lm/W

**TRIM** Powder coated paint or plated die-formed steel. Different finishes available. Painted finishes available with Marine Grade option.

**OPTIC SYSTEM** Interchangeable optional optical reflectors and lenses available to personalize your lighting. Protection lens covered with a high-performance film 98% effective. Lens of 1/8" (3 mm) thick and 1.9" (49 mm) Ø.

**Choice of available lenses:**  
 Clear (C), Frosted (F), Honeycombs (H), Linear (L), Prismatic (P) and Solite (S)

**Optical reflectors available:**  
**M:** Narrow Flood → 27°      **W:** Flood → 47°

**ADJUSTABILITY** Swivel: 360°  
 40° tilt and with locking position.  
 Choose aiming angle then tighten screws to lock into position.

**HEAT SINK** High quality aluminum injected heat sink ensuring maximum heat dissipation.

**CEILING CUTOUT** Ø 4-1/4" (108 mm)

**COMPATIBLE HOUSINGS**

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

|  | Remodel Housing                        | New Construction Housing               | Insulated Housing        |
|--|--|--|--------------------------|
| <b>Performance 1</b><br>(1,500 lumens) | RELD200LD1<br>RELD200LA1               | NWLD200LD1<br>NWLD200LA1               | ISLD200LD1<br>ISLD200LA1 |
| <b>Performance 2</b><br>(2,000 lumens) | RELD200LE2<br>RELD200LD2<br>RELD200LA2 | NWLD200LE2<br>NWLD200LD2<br>NWLD200LA2 | Not available            |

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

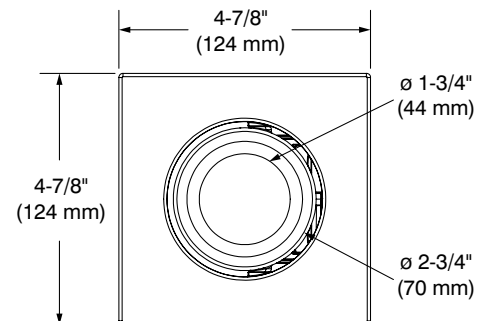
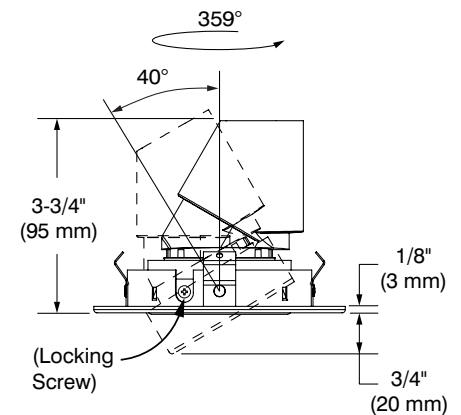
**CERTIFICATION** cULus E343977 for damp locations

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

Project \_\_\_\_\_  
 Notes \_\_\_\_\_  
 Fixture Type \_\_\_\_\_  
 Date \_\_\_\_\_



LD2BC-12BR (illustrated)



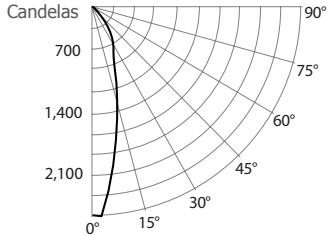
# Concerto LED - LD2B

4" Series

## PHOTOMETRIC DATA

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

| Distance | FC   | DIA  |
|----------|------|------|
| 06'      | 68.2 | 3.0' |
| 08'      | 38.4 | 4.0' |
| 10'      | 24.6 | 5.0' |
| 12'      | 17.1 | 5.9' |
| 14'      | 12.5 | 6.9' |
| 16'      | 9.6  | 7.9' |

Beam: 28°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

|                     |                      |              |
|---------------------|----------------------|--------------|
| Performance 1 LED   | 3,000K               | Narrow Flood |
| CBCP / Lumens       | 2,456                | / 1,094      |
| Watts               | 120V                 | 277V         |
|                     | 16.16W               | 16.66W       |
| Operating AMPS      | 0.13A                | 0.060A       |
| Lumen Maintenance   | L70 @ 50,000 Hrs     |              |
| CRI                 | 80 +                 |              |
| Lumens/Watt         | 67.5                 |              |
| Spacing Criteria    | 0.5                  |              |
| Certificate LM79-08 | Based on test 475821 |              |

#### 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  | 106 | 103 | 101 | 99  | 98  | 96  | 96  |  |
|                   | 4  | 96  | 91  | 93  | 89  | 91  | 88  | 88  |  |
|                   | 6  | 87  | 82  | 85  | 81  | 83  | 80  | 80  |  |
|                   | 8  | 78  | 74  | 77  | 73  | 76  | 72  | 72  |  |
|                   | 10 | 71  | 66  | 70  | 66  | 69  | 65  | 65  |  |

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30  | 779    | 71.24%     |
| 0-40  | 1,004  | 91.76%     |
| 0-60  | 1,089  | 99.59%     |
| 60-90 | 4      | 0.41%      |
| 0-90  | 1,094  | 100%       |

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

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5'                | 53                  | 0.72          |
| 6'                | 30                  | 0.4           |
| 7'                | 21                  | 0.28          |
| 8'                | 21                  | 0.28          |
| 9'                | 13                  | 0.17          |

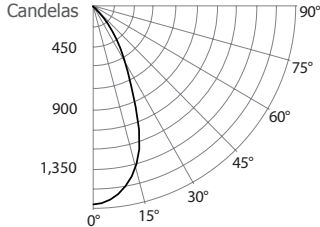
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).  
Reflection factor of 80%/50%/30%.

#### CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0                | 2,456    | 45               | 97       |
| 5                | 2,186    | 55               | 4        |
| 10               | 1,600    | 65               | 2        |
| 15               | 1,130    | 75               | 2        |
| 20               | 773      | 85               | 0        |
| 25               | 589      | 90               | 0        |
| 35               | 367      |                  |          |

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

| Distance | FC   | DIA   |
|----------|------|-------|
| 06'      | 43.3 | 5.3'  |
| 08'      | 24.3 | 7.0'  |
| 10'      | 15.6 | 8.8'  |
| 12'      | 10.8 | 10.5' |
| 14'      | 7.9  | 12.3' |
| 16'      | 6.1  | 14.1' |

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

#### LUMINAIRE

|                     |                      |         |
|---------------------|----------------------|---------|
| Performance 1 LED   | 3,000K               | Flood   |
| CBCP / Lumens       | 1,558                | / 1,088 |
| Watts               | 120V                 | 277V    |
|                     | 15.53W               | 16.03W  |
| Operating AMPS      | 0.19A                | 0.058A  |
| Lumen Maintenance   | L70 @ 50,000 Hrs     |         |
| CRI                 | 80 +                 |         |
| Lumens/Watt         | 70.2                 |         |
| Spacing Criteria    | 0.7                  |         |
| Certificate LM79-08 | Based on test 475823 |         |

#### 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  | 106 | 103 | 101 | 99  | 99  | 97  | 97  |  |
|                   | 4  | 97  | 92  | 93  | 90  | 92  | 89  | 89  |  |
|                   | 6  | 88  | 83  | 86  | 82  | 84  | 81  | 81  |  |
|                   | 8  | 80  | 75  | 78  | 74  | 77  | 74  | 74  |  |
|                   | 10 | 73  | 68  | 71  | 67  | 71  | 67  | 67  |  |

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30  | 822    | 75.4%      |
| 0-40  | 1,020  | 93.7%      |
| 0-60  | 1,085  | 99.6%      |
| 60-90 | 4      | 0.4%       |
| 0-90  | 1,088  | 100%       |

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

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5'                | 53                  | 0.69          |
| 6'                | 30                  | 0.39          |
| 7'                | 21                  | 0.27          |
| 8'                | 21                  | 0.27          |
| 9'                | 13                  | 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                | 1,558    | 45               | 73       |
| 5                | 1,527    | 55               | 3        |
| 10               | 1,438    | 65               | 3        |
| 15               | 1,287    | 75               | 1        |
| 20               | 1,032    | 85               | 0        |
| 25               | 698      | 90               | 0        |
| 35               | 318      |                  |          |

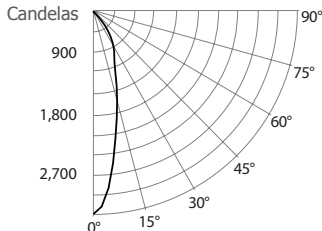
# Concerto LED - LD2B

4" Series

## PHOTOMETRIC DATA

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

| Distance | FC   | DIA  |
|----------|------|------|
| 06'      | 88.9 | 2.9' |
| 08'      | 50.0 | 3.9' |
| 10'      | 32.0 | 4.9' |
| 12'      | 22.2 | 5.8' |
| 14'      | 16.3 | 6.8' |
| 16'      | 12.5 | 7.8' |

Beam: 27°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

|                     |                      |              |
|---------------------|----------------------|--------------|
| Performance 2 LED   | 3,000K               | Narrow Flood |
| CBCP / Lumens       | 3,200                | / 1,435      |
| Watts               | 120V                 | 277V         |
|                     | 23.2W                | 23.7W        |
| Operating AMPS      | 0.13A                | 0.060A       |
| Lumen Maintenance   | L70 @ 50,000 Hrs     |              |
| CRI                 | 80 +                 |              |
| Lumens/Watt         | 61.8                 |              |
| Spacing Criteria    | 0.4                  |              |
| Certificate LM79-08 | Based on test 606976 |              |

#### COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 |     |     | 50  |     |     | 30  |     |     |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect %    | 50 | 30  | 50  | 30  | 50  | 30  | 50  | 30  | 30  |
| RCR               | 0  | 119 | 119 | 111 | 111 | 106 | 106 | 106 | 106 |
|                   | 2  | 106 | 103 | 101 | 99  | 98  | 98  | 96  | 96  |
|                   | 4  | 96  | 91  | 92  | 89  | 90  | 87  | 87  | 87  |
|                   | 6  | 87  | 81  | 84  | 80  | 83  | 79  | 79  | 79  |
|                   | 8  | 78  | 73  | 76  | 72  | 76  | 72  | 72  | 72  |
|                   | 10 | 71  | 66  | 69  | 65  | 69  | 65  | 65  | 65  |

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30  | 1,015  | 70.72%     |
| 0-40  | 1,309  | 91.23%     |
| 0-60  | 1,427  | 99.49%     |
| 60-90 | 7      | 0.51%      |
| 0-90  | 1,435  | 100%       |

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

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5'                | 69                  | 1.03          |
| 6'                | 39                  | 0.58          |
| 7'                | 27                  | 0.4           |
| 8'                | 27                  | 0.4           |
| 9'                | 17                  | 0.26          |

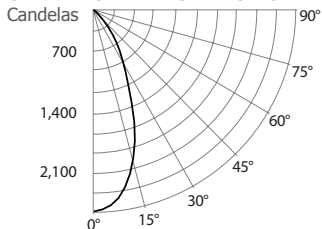
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).  
Reflection factor of 80%/50%/30%.

#### CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0                | 3,200    | 45               | 133      |
| 5                | 2,801    | 55               | 8        |
| 10               | 2,030    | 65               | 3        |
| 15               | 1,462    | 75               | 3        |
| 20               | 1,025    | 85               | 0        |
| 25               | 789      | 90               | 0        |
| 35               | 480      |                  |          |

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

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

| Distance | FC   | DIA   |
|----------|------|-------|
| 06'      | 66.3 | 4.9'  |
| 08'      | 37.3 | 6.5'  |
| 10'      | 23.9 | 8.2'  |
| 12'      | 16.6 | 9.8'  |
| 14'      | 12.2 | 11.5' |
| 16'      | 9.3  | 13.1' |

Beam: 45°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

|                     |                      |         |
|---------------------|----------------------|---------|
| Performance 2 LED   | 3,000K               | Flood   |
| CBCP / Lumens       | 2,387                | / 1,569 |
| Watts               | 120V                 | 277V    |
|                     | 23.15W               | 23.65W  |
| Operating AMPS      | 0.19A                | 0.085A  |
| Lumen Maintenance   | L70 @ 50,000 Hrs     |         |
| CRI                 | 80 +                 |         |
| Lumens/Watt         | 67.9                 |         |
| Spacing Criteria    | 0.7                  |         |
| Certificate LM79-08 | Based on test 606978 |         |

#### COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 |     |     | 50  |     |     | 30  |     |     |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect %    | 50 | 30  | 50  | 30  | 50  | 30  | 50  | 30  | 30  |
| RCR               | 0  | 119 | 119 | 111 | 111 | 106 | 106 | 106 | 106 |
|                   | 2  | 106 | 103 | 101 | 99  | 99  | 97  | 97  | 97  |
|                   | 4  | 96  | 92  | 93  | 90  | 91  | 88  | 88  | 88  |
|                   | 6  | 88  | 83  | 85  | 82  | 84  | 81  | 81  | 81  |
|                   | 8  | 79  | 75  | 78  | 74  | 77  | 73  | 73  | 73  |
|                   | 10 | 72  | 67  | 71  | 67  | 70  | 66  | 66  | 66  |

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

| ZONE  | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30  | 1,168  | 74.42%     |
| 0-40  | 1,462  | 93.15%     |
| 0-60  | 1,562  | 99.55%     |
| 60-90 | 7      | 0.45%      |
| 0-90  | 1,569  | 100%       |

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

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5'                | 76                  | 1.02          |
| 6'                | 43                  | 0.58          |
| 7'                | 30                  | 0.4           |
| 8'                | 30                  | 0.4           |
| 9'                | 19                  | 0.26          |

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                | 2,387    | 45               | 114      |
| 5                | 2,324    | 55               | 6        |
| 10               | 2,138    | 65               | 4        |
| 15               | 1,818    | 75               | 2        |
| 20               | 1,411    | 85               | 0        |
| 25               | 968      | 90               | 0        |
| 35               | 476      |                  |          |

# Concerto LED - LD2B

## 4" Series

### LD2B MODEL PHOTOMETRIC DATA

#### With performance 1 housing

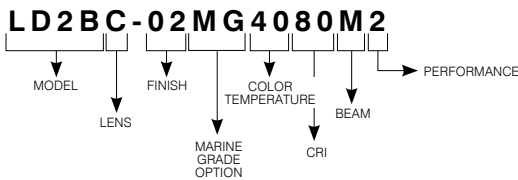
|                           | Narrow Flood |           | Flood     |           |
|---------------------------|--------------|-----------|-----------|-----------|
| <b>2,700K with 80 CRI</b> | 1,106 Lms    | 70.9 lm/W | 1,000 Lms | 63.7 lm/W |
| <b>3,000K with 90 CRI</b> | 933 Lms      | 59 lm/W   | 862.2 Lms | 54.3 lm/W |
| <b>3,500K with 80 CRI</b> | 1,239 Lms    | 79 lm/W   | 1,153 Lms | 73.4 lm/W |
| <b>4,000K with 80 CRI</b> | 1,189 Lms    | 75.2 lm/W | 1,256 Lms | 79.5 lm/W |

#### With performance 2 housing

|                           | Narrow Flood |           | Flood     |           |
|---------------------------|--------------|-----------|-----------|-----------|
| <b>2,700K with 80 CRI</b> | 1,780 Lms    | 82.8 lm/W | 1,610 Lms | 71.2 lm/W |
| <b>3,000K with 90 CRI</b> | 1,230 Lms    | 54.7 lm/W | 1,287 Lms | 56.9 lm/W |
| <b>3,500K with 80 CRI</b> | 1,625 Lms    | 75.6 lm/W | 1,662 Lms | 77.3 lm/W |
| <b>4,000K with 80 CRI</b> | 1,603 Lms    | 70.6 lm/W | 1,739 Lms | 76.3 lm/W |

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

### CODIFICATION EXAMPLE



### ORDERING CODES

| MODEL       | LENSES             | TRIM FINISHES                   | MARINE GRADE         | COLOR TEMPERATURES | CRI                | BEAMS                       | PERFORMANCE                                      |
|-------------|--------------------|---------------------------------|----------------------|--------------------|--------------------|-----------------------------|--|
| <b>LD2B</b> |                    |                                 |                      |                    |                    |                             | <b>2</b>   |
| <b>LD2B</b> | <b>C</b> Clear     | <b>-01</b> White                | <b>MG (optional)</b> | <b>27</b> 2,700K   | <b>80</b> 80+ CRI  | <b>M</b> Narrow Flood (27°) | Use with Performance 1 or Performance 2 Housings |
|             | <b>F</b> Frosted   | <b>-02</b> Black                | May be applied on    | <b>30</b> 3,000K   | <b>90</b> 90+ CRI  | <b>W</b> Flood (47°)        |  |
|             | <b>H</b> Honeycomb | <b>-03</b> 24K Gold Plated      | finishes: -01, -02,  | <b>35</b> 3,500K   | (only with 3,000K) |                             |  |
|             | <b>L</b> Linear    | <b>-04</b> Chrome               | -05, -06, -11 and    | <b>40</b> 4,000K   |                    |                             |  |
|             | <b>P</b> Prismatic | <b>-04BR</b> Brushed Chrome     | -15.                 |                    |                    |                             |  |
|             | <b>S</b> Solite    | <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        |                      |                    |                    |                             |  |

For future on site modification of the light distribution.

#### Ordering codes: replacement lenses.

##### Lenses (to modify light diffusion)

Linear: **103092** Honeycomb: **103089**  
 Solite: **103098** Frosted: **316228**  
 Prismatic: **103095** Clear: **103584**

##### Reflectors (to modify the beam angle)

For a Narrow Flood: **316082**  
 For a Flood: **316211**

### 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.

