

Concerto LED - LD2D

4" Series

Low Profile Round Adjustable Regressed Trim

DESCRIPTION

This series of adjustable round or square trims, offers a reflector and recessed lamp for a more discreet ambient lighting and visual comfort.

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 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 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: 1,070 lumens, 69 lm/W Performance 2: 1,485 lumens, 65 lm/W | | | | | | | | | | | |
| TRIM | Powder coated paint or plated die-formed steel. Different finishes available. | | | | | | | | | | | |
| 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), Honeycomb (H), Linear (L), Prismatic (P) and Solite (S) Optical reflectors available: M: Narrow Flood → 27° W: Flood → 48° | | | | | | | | | | | |
| AJUSTABILITY | 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. | | | | | | | | | | | |
| REFLECTOR | Anodized Natural Anodized (AN) Specular Specular (SP) | Painted White (01)* Black (02) Architectural Bronze (05)* | Antique Copper (06)* Matte White (11)* Metallic Grey (15)* | | | | | | | | | |
| | *These reflector colors are available only with the same trim color. | | | | | | | | | | | |
| CEILING CUTOUT | Ø 4-1/4" (108 mm) | | | | | | | | | | | |
| COMPATIBLE HOUSINGS | | Remodel Housing Performance 1 (1,500 lumens) Performance 2 (2,000 lumens) | <table border="1"> <thead> <tr> <th>Remodel Housing</th> <th>New Construction Housing</th> <th>Insulated Housing</th> </tr> </thead> <tbody> <tr> <td>RELD200LD1 RELD200LV1</td> <td>NWLD200LD1 NWLD200LV1</td> <td>ISLD200LD1 ISLD200LV1</td> </tr> <tr> <td>RELD200LD2 RELD200LV2</td> <td>NWLD200LD2 NWLD200LV2</td> <td>Not Available</td> </tr> </tbody> </table> | Remodel Housing | New Construction Housing | Insulated Housing | RELD200LD1 RELD200LV1 | NWLD200LD1 NWLD200LV1 | ISLD200LD1 ISLD200LV1 | RELD200LD2 RELD200LV2 | NWLD200LD2 NWLD200LV2 | Not Available |
| Remodel Housing | New Construction Housing | Insulated Housing | | | | | | | | | | |
| RELD200LD1 RELD200LV1 | NWLD200LD1 NWLD200LV1 | ISLD200LD1 ISLD200LV1 | | | | | | | | | | |
| RELD200LD2 RELD200LV2 | NWLD200LD2 NWLD200LV2 | Not Available | | | | | | | | | | |
| | For dimming, please refer to the selected housing specification sheet. | | | | | | | | | | | |
| CERTIFICATION | cULus E343977 for damp locations | | | | | | | | | | | |
| WARRANTY | 1 year for standard finishes and 5 years on LED module. | | | | | | | | | | | |

Project _____

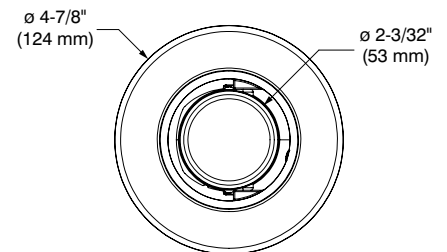
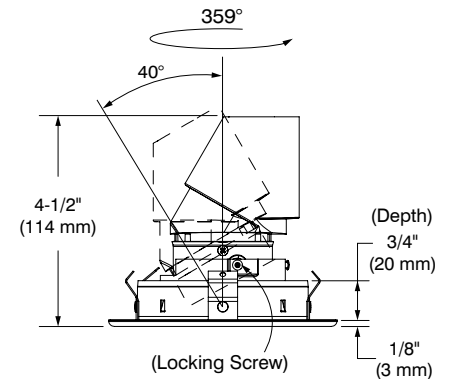
Notes _____

Fixture Type _____

Date _____



LD2D-13SP
(illustrated)



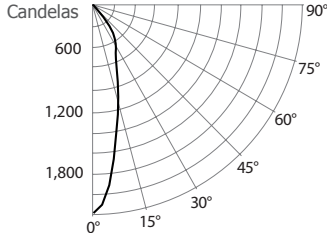
Concerto LED - LD2D

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|------|
| 06' | 59.9 | 2.9' |
| 08' | 33.7 | 3.9' |
| 10' | 21.6 | 4.9' |
| 12' | 15.0 | 5.9' |
| 14' | 11.0 | 6.8' |
| 16' | 8.4 | 7.8' |

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

LUMINAIRE

| | | |
|---------------------|------------------|--------------|
| Performance 1 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 2,157 | / 928 |
| Watts | 120V | 277V |
| | 15.9W | 16.4W |
| Operating AMPS | 0.13A | 0.058A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 80 + | |
| Lumens/Watt | 58 | |
| Spacing Criteria | 0.4 | |
| Certificate LM79-08 | 475807 | |

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 | 107 | 104 | 102 | 100 | 99 | 97 | | |
| | 4 | 97 | 93 | 94 | 90 | 92 | 89 | | |
| | 6 | 88 | 84 | 86 | 83 | 85 | 82 | | |
| | 8 | 80 | 76 | 79 | 75 | 78 | 74 | | |
| | 10 | 73 | 69 | 72 | 68 | 71 | 68 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30 | 691 | 74.43% |
| 0-40 | 898 | 96.78% |
| 0-60 | 927 | 99.88% |
| 60-90 | 1 | 0.12% |
| 0-90 | 928 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 45 | 0.7 |
| 6' | 25 | 0.4 |
| 7' | 18 | 0.28 |
| 8' | 18 | 0.28 |
| 9' | 11 | 0.18 |

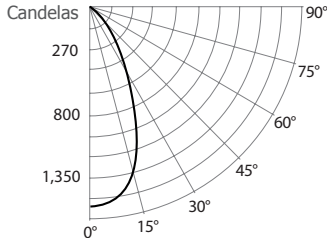
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/ VERTICAL | CANDELAS | DEGREES/ VERTICAL | CANDELAS |
|-------------------|----------|-------------------|----------|
| 0 | 2,157 | 45 | 12 |
| 5 | 1,879 | 55 | 1 |
| 10 | 1,356 | 65 | 1 |
| 15 | 987 | 75 | 0 |
| 20 | 700 | 85 | 0 |
| 25 | 547 | 90 | 0 |
| 35 | 354 | | |

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|------|
| 06' | 42.1 | 5.3 |
| 08' | 23.7 | 7.1 |
| 10' | 15.2 | 8.9 |
| 12' | 10.5 | 10.7 |
| 14' | 7.7 | 12.5 |
| 16' | 5.9 | 14.3 |

Beam: 48°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|---------------------|------------------|---------|
| Performance 1 LED | 3,000K | Flood |
| CBCP / Lumens | 1,515 | / 1,062 |
| Watts | 120V | 277V |
| | 15.5W | 16W |
| Operating AMPS | 0.13A | 0.057A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 80 + | |
| Lumens/Watt | 69 | |
| Spacing Criteria | 0.8 | |
| Certificate LM79-08 | 475809 | |

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 | 107 | 104 | 102 | 99 | 99 | 97 | | |
| | 4 | 97 | 93 | 94 | 90 | 92 | 89 | | |
| | 6 | 88 | 84 | 86 | 82 | 85 | 82 | | |
| | 8 | 80 | 76 | 79 | 75 | 78 | 74 | | |
| | 10 | 73 | 69 | 72 | 68 | 71 | 68 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30 | 811 | 76.30% |
| 0-40 | 1,025 | 96.50% |
| 0-60 | 1,059 | 99.60% |
| 60-90 | 4 | 0.40% |
| 0-90 | 1,062 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 52 | 0.69 |
| 6' | 29 | 0.39 |
| 7' | 20 | 0.27 |
| 8' | 20 | 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 | 1,515 | 45 | 14 |
| 5 | 1,485 | 55 | 2 |
| 10 | 1,396 | 65 | 2 |
| 15 | 1,250 | 75 | 1 |
| 20 | 1,015 | 85 | 1 |
| 25 | 700 | 90 | 0 |
| 35 | 358 | | |

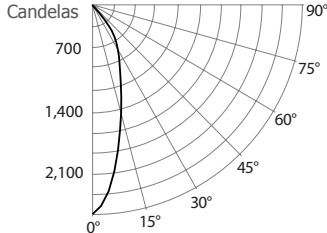
Concerto LED - LD2D

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|------|
| 06' | 68.6 | 3.5' |
| 08' | 38.6 | 4.6' |
| 10' | 24.7 | 5.8' |
| 12' | 17.2 | 6.9' |
| 14' | 12.6 | 8.1' |
| 16' | 9.7 | 9.2' |

Beam: 32°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|---------------------|------------------|--------------|
| Performance 2 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 2,471 | / 1,247 |
| Watts | 120V | 277V |
| | 23.1W | 23.6W |
| Operating AMPS | 0.19A | 0.085A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 80 + | |
| Lumens/Watt | 54 | |
| Spacing Criteria | 0.5 | |
| Certificate LM79-08 | 606972 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | 50 | 30 |
|-------------------|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 |
| RCR | 0 | 119 | 119 |
| | 111 | 111 | 106 |
| | 106 | 106 | 106 |
| | 2 | 107 | 103 |
| | 101 | 99 | 99 |
| | 97 | 97 | 97 |
| | 4 | 96 | 92 |
| | 93 | 90 | 91 |
| | 89 | 89 | 89 |
| | 6 | 88 | 83 |
| | 86 | 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 | 914 | 73.29% |
| 0-40 | 1,190 | 95.42% |
| 0-60 | 1,246 | 99.92% |
| 60-90 | 1 | 0.08% |
| 0-90 | 1,247 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 61 | 1.02 |
| 6' | 34 | 0.58 |
| 7' | 24 | 0.4 |
| 8' | 24 | 0.4 |
| 9' | 15 | 0.26 |

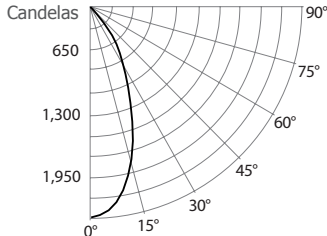
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 2,471 | 45 | 39 |
| 5 | 2,211 | 55 | 1 |
| 10 | 1,747 | 65 | 2 |
| 15 | 1,313 | 75 | 0 |
| 20 | 986 | 85 | 0 |
| 25 | 763 | 90 | 0 |
| 35 | 459 | | |

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|-------|
| 06' | 64.6 | 4.9' |
| 08' | 36.3 | 6.6' |
| 10' | 23.2 | 8.2' |
| 12' | 16.1 | 9.9' |
| 14' | 11.9 | 11.5' |
| 16' | 9.1 | 13.2' |

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

LUMINAIRE

| | | |
|---------------------|------------------|---------|
| Performance 2 LED | 3,000K | Flood |
| CBCP / Lumens | 2,324 | / 1,484 |
| Watts | 120V | 277V |
| | 23W | 23.5W |
| Operating AMPS | 0.19A | 0.084A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 80 + | |
| Lumens/Watt | 64 | |
| Spacing Criteria | 0.7 | |
| Certificate LM79-08 | 606974 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | 50 | 30 |
|-------------------|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 |
| RCR | 0 | 119 | 119 |
| | 111 | 111 | 106 |
| | 106 | 106 | 106 |
| | 2 | 107 | 104 |
| | 102 | 100 | 99 |
| | 97 | 97 | 97 |
| | 4 | 97 | 93 |
| | 94 | 91 | 92 |
| | 89 | 89 | 89 |
| | 6 | 89 | 84 |
| | 87 | 83 | 85 |
| | 82 | 82 | 82 |
| | 8 | 81 | 76 |
| | 79 | 75 | 78 |
| | 75 | 75 | 75 |
| | 10 | 74 | 69 |
| | 72 | 68 | 72 |
| | 68 | 68 | 68 |

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30 | 1,139 | 76.76% |
| 0-40 | 1,439 | 96.94% |
| 0-60 | 1,484 | 99.95% |
| 60-90 | 1 | 0.05% |
| 0-90 | 1,484 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 72 | 1.02 |
| 6' | 41 | 0.58 |
| 7' | 28 | 0.4 |
| 8' | 28 | 0.4 |
| 9' | 18 | 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 | 2,324 | 45 | 20 |
| 5 | 2,255 | 55 | 1 |
| 10 | 2,058 | 65 | 1 |
| 15 | 1,743 | 75 | 0 |
| 20 | 1,347 | 85 | 0 |
| 25 | 980 | 90 | 0 |
| 35 | 499 | | |



Concerto LED - LD2D

4" Series

LD2D MODEL PHOTOMETRIC DATA

With performance 1 housing

| | Narrow Flood | | Flood | |
|---------------------------|--------------|-----------|-----------|-----------|
| 2,700K with 80 CRI | 1,102 Lms | 70.8 lm/W | 927 Lms | 59 lm/W |
| 3,000K with 90 CRI | 806 Lms | 51 lm/W | 815 Lms | 51.6 lm/W |
| 3,500K with 80 CRI | 1,047 Lms | 66.3 lm/W | 1,124 Lms | 71.6 lm/W |
| 4,000K with 80 CRI | 1,122 Lms | 71 lm/W | 1,246 Lms | 78.6 lm/W |

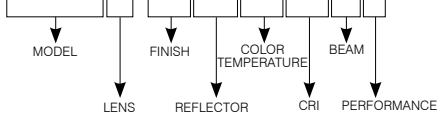
With performance 2 housing

| | Narrow Flood | | Flood | |
|---------------------------|--------------|-----------|-----------|-----------|
| 2,700K with 80 CRI | 1,302 Lms | 60.6 lm/W | 1,550 Lms | 68.9 lm/W |
| 3,000K with 90 CRI | 1,061 Lms | 49.3 lm/W | 1,140 Lms | 53 lm/W |
| 3,500K with 80 CRI | 1,352 Lms | 62.9 lm/W | 1,530 Lms | 71.2 lm/W |
| 4,000K with 80 CRI | 1,454 Lms | 64.1 lm/W | 1,701 Lms | 74.9 lm/W |

* All .ies and Lighting facts files are available on our Website.

CODIFICATION EXAMPLE

LD2DC-02SP2780M2



ORDERING CODES

| MODEL | LENSES | TRIM FINISHES | REFLECTORS | COLOR TEMPERATURES | CRI | BEAMS | PERFORMANCE |
|-------------|--------------------|---------------------------------|---------------------------------|--------------------|--------------------|-----------------------------|--|
| LD2D | | | | | | | 2 |
| LD2D | C Clear | -01 White | ANODIZED | 27 2,700K | 80 80+ CRI | M Narrow Flood (27°) | Use with Performance 1 or Performance 2 Housings |
| | F Frosted | -02 Black | AN Anodized Aluminum | 30 3,000K | 90 90+ CRI | W Flood (48°) | |
| | H Honeycomb | -03 24K Gold Plated | | 35 3,500K | | | |
| | L Linear | -04 Chrome | SPECULAR | 40 4,000K | | | |
| | P Prismatic | -04BR Brushed Chrome | SP Specular | | (only with 3,000K) | | |
| | S Solite | -05 Architectural Bronze | PAINTED | | | | |
| | | -06 Antique Copper | 01 White* | | | | |
| | | -11 Matte White | 02 Black | | | | |
| | | -12BR Brushed Nickel | 05 Architectural Bronze* | | | | |
| | | -13 Satin Nickel | 06 Antique Copper* | | | | |
| | | -15 Metallic Grey | 11 Matte White* | | | | |
| | | | 15 Metallic Grey* | | | | |

*These reflector colors are available only with the same trim color.

For future on site modification of the light distribution.

Ordering codes: replacement lenses and reflectors

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**

