

Concerto LED - LD2A

4" Series

Low Profile Round 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 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: 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 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 | Remodel Housing | New Construction Housing | Insulated 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 |
| | | | 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 _____

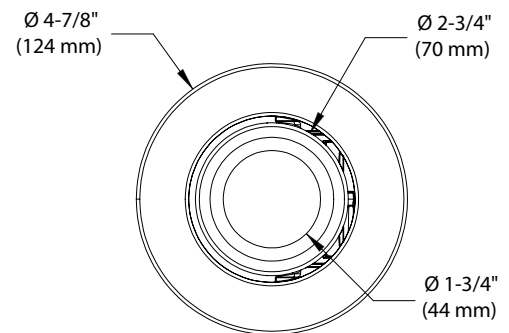
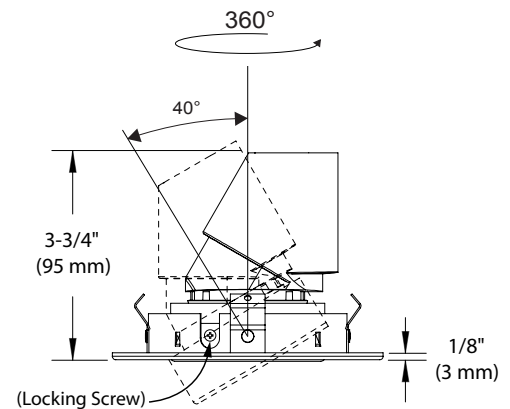
Notes _____

Fixture Type _____

Date _____



LD2AC-12BR
(illustrated)



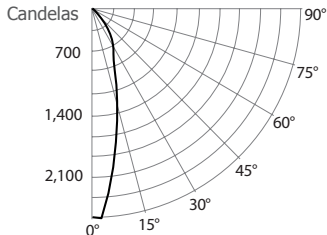
Concerto LED - LD2A

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 | 475821 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | | 50 | | | 30 | | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | 106 | 106 |
| | 2 | 106 | 103 | 101 | 99 | 98 | 96 | 96 | 96 | 96 |
| | 4 | 96 | 91 | 93 | 89 | 91 | 88 | 88 | 88 | 88 |
| | 6 | 87 | 82 | 85 | 81 | 83 | 80 | 80 | 80 | 80 |
| | 8 | 78 | 74 | 77 | 73 | 76 | 72 | 72 | 72 | 72 |
| | 10 | 71 | 66 | 70 | 66 | 69 | 65 | 65 | 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 |

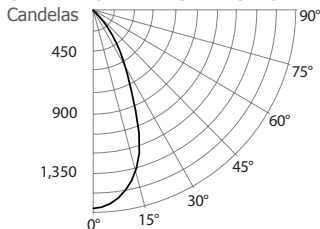
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

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 | 475823 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | | 50 | | | 30 | | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | 106 | 106 |
| | 2 | 106 | 103 | 101 | 99 | 99 | 97 | 97 | 97 | 97 |
| | 4 | 97 | 92 | 93 | 90 | 92 | 89 | 89 | 89 | 89 |
| | 6 | 88 | 83 | 86 | 82 | 84 | 81 | 81 | 81 | 81 |
| | 8 | 80 | 75 | 78 | 74 | 77 | 74 | 74 | 74 | 74 |
| | 10 | 73 | 68 | 71 | 67 | 71 | 67 | 67 | 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 | | |



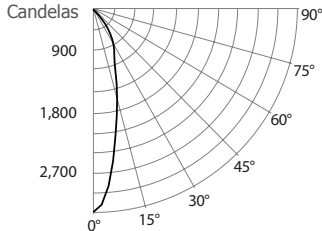
Concerto LED - LD2A

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 | 606976 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | | 50 | | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | 106 |
| | 2 | 106 | 103 | 101 | 99 | 98 | 96 | 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 |

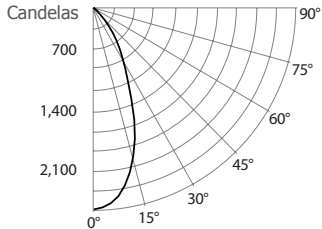
Local 38' x 38' x 10'. Workplan located 2 1/2' (30°).
Reflection factor of 80%/50%/30%.

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 | 606978 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | | 50 | | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 |
| 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 - LD2A

4" Series


LIGHTING FACTS


CONCERTO

| | |
|-----------------------------------|--------------|
| Light Output (Lumens) | 1097 |
| Watts | 16.09 |
| Lumens per Watt (Efficacy) | 68 |

| | |
|------------------------------------------------------|-----------|
| Color Accuracy Color Rendering Index (CRI) | 82 |
|------------------------------------------------------|-----------|

Light Color
Correlated Color Temperature (CCT) **3132 (Bright White)**




2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.


Registration Number: LVBP-H7OGBJ (7/22/2014)
Model Number: LD2A-3080M2 / ISLDXX1, RELDXX1, NWLDXX1
Type: Luminaire - Downlight


CONCERTO

| | |
|-----------------------------------|--------------|
| Light Output (Lumens) | 1458 |
| Watts | 23.18 |
| Lumens per Watt (Efficacy) | 62 |

| | |
|------------------------------------------------------|-----------|
| Color Accuracy Color Rendering Index (CRI) | 81 |
|------------------------------------------------------|-----------|

Light Color
Correlated Color Temperature (CCT) **3132 (Bright White)**




2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.


Registration Number: LVBP-VH378X (7/22/2014)
Model Number: LD2A-3080M2 / ISLDXX2, RELDXX2, NWLDXX2
Type: Luminaire - Downlight


CONCERTO

| | |
|-----------------------------------|--------------|
| Light Output (Lumens) | 1607 |
| Watts | 23.21 |
| Lumens per Watt (Efficacy) | 69 |

| | |
|------------------------------------------------------|-----------|
| Color Accuracy Color Rendering Index (CRI) | 81 |
|------------------------------------------------------|-----------|

Light Color
Correlated Color Temperature (CCT) **3053 (Bright White)**



2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: LVBP-550AID (7/22/2014)
Model Number: LD2A-3080W2 / ISLDXX2, RELDXX2, NWLDXX2
Type: Luminaire - Downlight



Concerto LED - LD2A

4" Series

LD2A MODEL PHOTOMETRIC DATA

With performance 1 housing

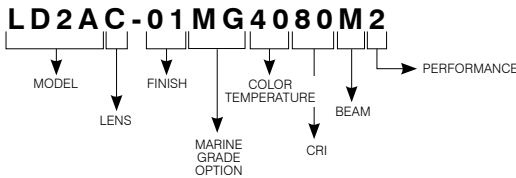
| | Narrow Flood | | Flood | |
|---------------------------|--------------|-----------|-----------|-----------|
| 2,700K with 80 CRI | 1,106 Lms | 70.9 lm/W | 1,000 Lms | 63.7 lm/W |
| 3,000K with 90 CRI | 933 Lms | 59 lm/W | 862.2 Lms | 54.3 lm/W |
| 3,500K with 80 CRI | 1,239 Lms | 79 lm/W | 1,153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

With performance 2 housing

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

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

CODIFICATION EXAMPLE



ORDERING CODE

| MODEL | LENS | FINISH | MARINE GRADE | COLOR TEMPERATURE | CRI | BEAM | PERFORMANCE |
|-------------|---------------------|---------------------------------|----------------------|-------------------|--------------------|-----------------------------------------------------------------------------------|-------------|
| LD2A | | | | | | | 2 |
| LD2A | C Clear | -01 White | MG (optional) | 27 2,700K | 80 80+ CRI | M Narrow Flood (27°) W Flood (47°) | 2 |
| | F Frosted | -02 Black | May be applied on | 30 3,000K | 90 90+ CRI | | |
| | H Honeycombs | -03 Gold Plated 24K | finishes: -01, -02, | 35 3,500K | (only with 3,000K) | Use with Performance 1 (1,500 lumens) or Performance 2 (2,000 lumens) Housings | |
| | L Linear | -04 Chrome | -05, -06, -11 and | 40 4,000K | | | |
| | P Prismatic | -04BR Brushed Chrome | -15. | | | | |
| | S Solite | -05 Architectural Bronze | | | | | |
| | | -06 Antique Copper | | | | | |
| | | -11 Matte White | | | | | |
| | | -12BR Brushed Nickel | | | | | |
| | | -13 Satin Nickel | | | | | |
| | | -15 Metallic Grey | | | | | |
| | | -17 Antique Nickel | | | | | |

For future on site modification of the light distribution.

Ordering codes: replacement lenses.

Lenses (to modify light diffusion)

Linear: **103092** Honeycombs: **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 - 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.

