

SPECIFICATION SHEET

Ardito LED - A4RAR

4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim

Project _____

Notes _____

Fixture Type _____

Date _____



WITH FLANGE

A4RAR-1111 - XXX (illustrated)



FLANGELESS TRIM

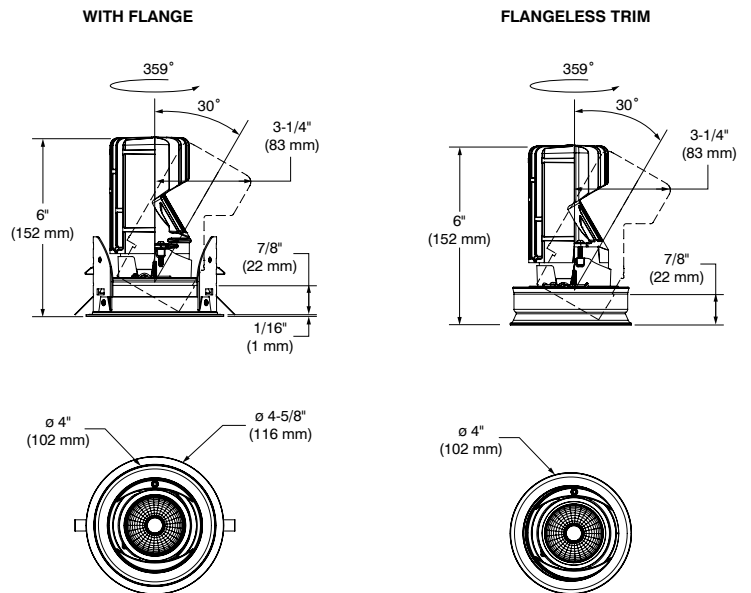
A4RAR-TR11 - XXX (illustrated)

Aluminum round, adjustable, 4" high efficiency regressed dimmable LED downlight allowing up to 30° tilt and 359° internal rotation. Adjustable and lockable from below the ceiling. May be installed with a low profile ultra-thin flange or flangeless trim in configuration for insulated, non-insulated and remodel (non-IC) ceilings.

SPECIFICATIONS



| | |
|----------------|--|
| TRIM DETAILS | <p>Requires a 6-1/2" (165 mm) clearance beyond the ceiling level for standard using and 7" (178 mm) for Lumenetix option using.</p> <p>Perfect fit into ceiling</p> <p>Each part of the housing should be at LEAST 3" (76 mm) from insulation (non-IC configurations)</p> <p>Can fit in ceilings up to 1-1/2" (38 mm) thick</p> <p>Junction box is accessible from below the ceiling for ease of maintenance</p> |
| AJUSTABILITY | <p>Swivel: 359°</p> <p>Tilt: 30°</p> <p>Locking device: choose aiming angle then tighten the screw to lock both axis into position from below the ceiling.</p> |
| HEAT SINK | <p>High quality injection molded aluminum heat sink ensuring maximum heat dissipation for optimal performance.</p> |
| CEILING CUTOUT | <p>ø 4-1/4" (108 mm)</p> |
| CERTIFICATION | <ul style="list-style-type: none"> cULus E343977 for damp locations Certified under California Energy Commission according to reference joint Appendix 8 (JA8-2016) Air Tight when used with ICAT Housing |
| WARRANTY | <p>1 year on components against manufacturing defects</p> <p>5 years on LED arrays and drivers</p> |



Ardito LED - A4RAR

4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim



SPECIFICATIONS (CONT'D)

LIGHT ENGINE

Options in red may generate a longer production lead time

STANDARD (SOLID WHITE)

Lumileds Luxeon CoB 1205 GEN3 for Narrow Flood and Flood beams. Lumileds Luxeon CoB 1203 GEN3 for Spot beam.

L_{70} @ 50,000 hours of operation.

3-Step MacAdam ellipse (3 SDCM)

Color Temperatures: 2,700K - 3,000K - 3,500K - 4,000K

CRI: 90+ (93 typical)

R9: >50

Delivered Lumens: Performance 1 (14W) - 1,356 lumens @ 3,000K, 96 lm/W
Performance 2 (23W) - 1,923 lumens @ 3,000K, 81 lm/W

Power Supply: 120V / 277V (universal input)

One driver available in 2 performances (14W and 23W) and offering 2 dimming options within the same unit:

ELV: 120V only 0-10V: 120V / 277V

Consult housing specification sheet for more details.

WARM DIMMING (WD)

Lumenetix Araya DDM1 Dynamic Dimming Module. Delivers dimmable (100% - 1%) white light that warms as it dims, reproducing dimming conditions of a halogen lamp. It allows the user to change the color temperature from 3,050K to 1,800K at minimum intensity all this while ensuring a 90+ CRI over the full dimming range.

L_{70} @ 50,000 hours of operation.

2-Step MacAdam ellipse (2 SDCM)

Color Temperatures: 3,050K to 1,800K

CRI: 90+ (over the entire dimming range)

Delivered Lumens: Performance L (12.5W) - up to 700 lumens

Power Supply: 120V - 277V (universal input)

One driver available in one performance (12.5W) and offering one dimming option:

0-10V: 120V / 277V

Consult Lumenetix Website (www.lumenetix.com) and refer to the documentation for the DDM119 module for more information.

COLOR TUNING (CT)

Lumenetix Araya CTM1 Color Tuning Module. Delivers tunable and dimmable (100% - 1%) white light from 1,650K to 4,000K as well as millions of colors.

L_{70} @ 50,000 hours of operation.

2-Step MacAdam ellipse (2 SDCM)

Color Temperatures: 1,650K to 4,000K (adjustable)

CRI: 90+ (for all solid white)

Delivered Lumens: Performance L (12.5W) - up to 700 lumens

Power Supply: 120V - 277V (universal input)

One driver available in one performance (12.5W) and offering different control options:

DMX512-A: 4 channels - DIM (dim level) - CCT (correlated color temperature)
 - SAT (saturation level) - HUE (color)

0-10V: One dimmer per channel (ex.: DIM and CCT)

"Araya 5" iOS App. (free): Allows programation of up to 5 scenes. The App. can be used to override the cabled system.

Consult Lumenetix Website (www.lumenetix.com) and refer to the documentation for the CTM119 module for more information.

CONTRASTE

2020-09
Revision 2

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SPECIFICATION SHEET

Ardito LED - A4RAR

4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim



SPECIFICATIONS (CONT'D)

COMPATIBLE HOUSINGS

| | Remodel Housing | New Construction Housing | Insulated Housing | Insulated Air Tight Housing (Title 24) | Ceiling thickness suggested for insulated housing as a using standard and Lumenetix option |
|----------------------------|-----------------|--------------------------|-------------------|--|---|
| Performance 1 (14W) | REA4V1 | NWA4RV1 | *ISA4RV1 | *ICAT6R4-ARV1 | * Ceiling thickness must be at least 1/4" (6.4 mm) for insulated housing as a using standard. |
| Performance 2 (23W) | REA4V2 | NWA4RV2 | *ISA4RV2 | *ICAT6R4-ARV2 | |
| Lumenetix (12.5W) | REA4VL | NWA4RVL | **ISA4RVL | | ** Ceiling thickness must be at least 3/4" (19 mm) for insulated housing with Lumenetix option. |

For dimming, please visit our Web site frequently to find our suggested compatible dimmers: www.contrastlighting.com

OPTIC SYSTEM

Interchangeable optional optical reflectors and lenses available to customize your lighting.

Choice of available lenses:

Stackable (up to 2) (sold separately)

Clear (C)

Frosted (F)

Honeycomb (H): the honeycomb louver reduces glare

Linear (L): the linear lens directs the lamp beam to create a strip of light

Prismatic (P): the prismatic lens diffuses and spreads the light in an even overall pattern

Solite (S): the solite lens softens the light in an even overall pattern

Optical reflectors available: Spot, Narrow Flood, Flood

| | Standard | Lumenetix |
|---------------------------|----------|---------------|
| Spot (S) | 15° | Not available |
| Narrow Flood (M) | 32° | 33° |
| Flood (L) | 40° | 44° |

* Average beams shown. Consult .ies files on our Website for more details.

FLANGE FINISHES

Powder coat painted or plated die formed steel.

Options in red may generate a longer production lead time

Different finishes available:

24K Gold Plated (-03), Chrome (-04), Brushed Chrome (-04BR), Matte White (-11), Brushed Nickel (-12BR), Satin Nickel (-13), Matte Black (-22) and Polar Grey (-25)

REFLECTOR FINISHES

Specular
Clear (**CL**)

Options in red may generate a longer production lead time

Painted
Matte White (**11**)
Matte black (**22**)
Natural Anodized Aluminum (**AN**)
Black (**BK**)

FLANGELESS TRIMS (OPTION)

Perforated aluminum plate for flangeless product, allowing you to plaster up to the edge of the opening of the Ardito luminaire.

Mud-in-plate sold separately.

Ordering code: MIPA4R

Consult housing specification sheet for more details.

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SPECIFICATION SHEET

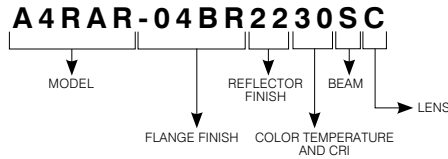
Ardito LED - A4RAR

4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim



TRIM WITH FLANGE CODIFICATION EXAMPLE

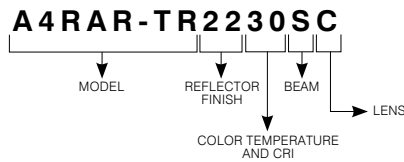


Options in red may generate a longer production lead time.

TRIM WITH FLANGE ORDERING CODES **A4RAR**

| MODEL | FLANGE FINISHES | REFLECTOR FINISHES | COLOR TEMPERATURES AND CRI | BEAMS | LENSES |
|--------------|-----------------------------|-------------------------------------|--------------------------------------|---|--------------------|
| A4RAR | | | | | |
| A4RAR | -04BR Brushed Chrome | PAINTED | 27 2,700K (90+ CRI) | S Spot (15°) <i>(not available with CT and WD)</i> M Narrow Flood (32°) <i>CT and WD (33°)</i> L Flood (40°) <i>CT and WD (44°)</i> | C Clear |
| | -11 Matte White | 11 Matte White | 30 3,000K (90+ CRI) | | F Frosted |
| | -12BR Brushed Nickel | 22 Matte Black | 35 3,500K (90+ CRI) | | H Honeycomb |
| | -22 Matte Black | AN Natural Anodized Aluminum | 40 4,000K (90+ CRI) | | L Linear |
| | -25 Polar Grey | BK Black | CT 1,650K to 4,000K (90+ CRI) | | P Prismatic |
| | -03 24K Gold Plated | CL Clear | WD 3,050K to 1,800K (90+ CRI) | | S Solite |
| | -04 Chrome | | | | |
| | -13 Satin Nickel | | | | |

FLANGELESS TRIM OPTION — CODIFICATION EXAMPLE



Mud-in-plate required for use of flangeless trim (see ordering code on next page)

Options in red may generate a longer production lead time.

FLANGELESS TRIM OPTION — ORDERING CODES **A4RAR-TR**

| MODEL | REFLECTOR FINISHES | COLOR TEMPERATURES AND CRI | BEAMS | LENSES |
|-----------------|-------------------------------------|--------------------------------------|---|--------------------|
| A4RAR-TR | | | | |
| A4RAR-TR | PAINTED | 27 2,700K (90+ CRI) | S Spot (15°) <i>(not available with CT and WD)</i> M Narrow Flood (32°) <i>CT and WD (33°)</i> L Flood (40°) <i>CT and WD (44°)</i> | C Clear |
| | 11 Matte White | 30 3,000K (90+ CRI) | | F Frosted |
| | 22 Matte Black | 35 3,500K (90+ CRI) | | H Honeycomb |
| | AN Natural Anodized Aluminum | 40 4,000K (90+ CRI) | | L Linear |
| | BK Black | CT 1,650K to 4,000K (90+ CRI) | | P Prismatic |
| | CL Clear | WD 3,050K to 1,800K (90+ CRI) | | S Solite |
| | SPECULAR | | | |

SPECIFICATION SHEET

Ardito LED - A4RAR

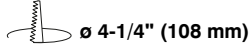
4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim

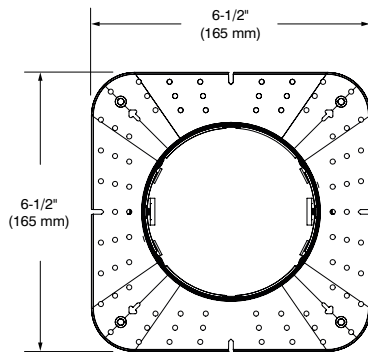


MUD-IN-PLATE

Required with the use of flangeless trims.
Consult housing specification sheet for more details.



Code: MIPA4R



ORDERING CODES

for replacement lenses and reflectors

For future on-site modifications of the light distribution.

Lenses (to modify light diffusion)

Stackable (up to 2)

Clear (C): **104036**

Frosted (F): **317240**

Linear (L): **104037**

Solite (S): **104038**

Prismatic (P): **104039**

Honeycomb (H): **104040**

Reflectors (to modify the beam angle)

For a Spot: **103942**

For a Narrow Flood: **103912**

For a Flood: **103943**

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Ardito LED - A4RAR

4" Series

Ultra-Thin Profile Round Adjustable Regressed Trim

PHOTOMETRIC DATA



In order to obtain the accurate photometric data, multiply the lumens relative to your product selection by the applicable factor(s). Take note these factors also need to be implemented in the .ies files available on our website.

WITH PERFORMANCE 1 HOUSING (14W)

| | Spot (15°) | | Narrow Flood (32°) | | Flood (40°) | |
|----------------------------|------------|-------|--------------------|------|-------------|------|
| | lm | lm/W | lm | lm/W | lm | lm/W |
| 2,700K with 90+ CRI | 1,309 | 93.5 | 1,249 | 89.2 | 1,214 | 86.7 |
| 3,000K with 90+ CRI | 1,356 | 96.9 | 1,294 | 92.4 | 1,258 | 89.9 |
| 3,500K with 90+ CRI | 1,422 | 101.6 | 1,356 | 96.9 | 1,319 | 94.2 |
| 4,000K with 90+ CRI | 1,458 | 104.1 | 1,391 | 99.4 | 1,353 | 96.6 |

JAB
LISTED

WITH PERFORMANCE 2 HOUSING (23W)

| | Spot (15°) | | Narrow Flood (32°) | | Flood (40°) | |
|----------------------------|------------|------|--------------------|------|-------------|------|
| | lm | lm/W | lm | lm/W | lm | lm/W |
| 2,700K with 90+ CRI | 1,856 | 80.7 | 1,804 | 78.4 | 1,812 | 78.8 |
| 3,000K with 90+ CRI | 1,923 | 83.6 | 1,869 | 81.3 | 1,878 | 81.7 |
| 3,500K with 90+ CRI | 2,016 | 87.7 | 1,960 | 85.2 | 1,969 | 85.6 |
| 4,000K with 90+ CRI | 2,068 | 89.9 | 2,010 | 87.4 | 2,019 | 87.8 |

JAB
LISTED

WITH PERFORMANCE L HOUSING (12.5W)

| | Narrow Flood (33°) | | Flood (44°) | |
|---------------------------------------|--------------------|------|-------------|------|
| | lm | lm/W | lm | lm/W |
| Warm Dimming (WD) with 90+ CRI | 668 | 53.4 | 649 | 51.9 |
| Color Tuning (CT) with 90+ CRI | 700 | 56 | 680 | 54.4 |

| Lens Factors | |
|--------------|------|
| C | 1 |
| F | 0.71 |
| H | 0.57 |

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Ardito LED - A4RAR

4" Series

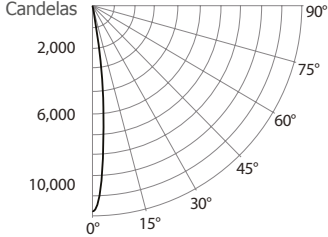
Ultra-Thin Profile Round Adjustable Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Spot, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|------|
| 06' | 326.5 | 1.6' |
| 08' | 183.6 | 2.1' |
| 10' | 117.5 | 2.6' |
| 12' | 81.6 | 3.2' |
| 14' | 59.9 | 3.7' |
| 16' | 45.9 | 4.2' |

Beam: 15°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|-------------------|------------------|-----------|
| Performance 1 LED | 3,000K | Spot |
| CBCP / Lumens | 11,753 | / 1,356.2 |
| Watts | 120V | 277V |
| | 14W | 14.5W |
| Operating AMPS | 0.12A | 0.052A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 96.9 | |
| Spacing Criteria | 0.26 | |

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 | 109 | 106 | 104 | 102 | 101 | 99 | 99 | 99 | 99 |
| | 4 | 101 | 97 | 98 | 95 | 96 | 94 | 94 | 94 | 94 |
| | 6 | 95 | 91 | 93 | 90 | 92 | 89 | 89 | 89 | 89 |
| | 8 | 90 | 86 | 89 | 86 | 88 | 85 | 85 | 85 | 85 |
| | 10 | 86 | 82 | 85 | 82 | 84 | 81 | 81 | 81 | 81 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,327.6 | 97.9% |
| 0-40 | 1,356.1 | 100% |
| 0-60 | 1,356.2 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,356.2 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 69 | 0.59 |
| 6' | 39 | 0.33 |
| 7' | 27 | 0.23 |
| 8' | 27 | 0.23 |
| 9' | 17 | 0.15 |

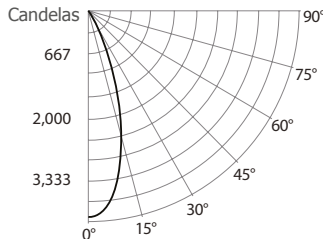
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 11,753 | 40 | 0 |
| 5 | 8,353 | 50 | 0 |
| 10 | 3,936 | 60 | 0 |
| 15 | 1,524 | 70 | 0 |
| 20 | 836 | 80 | 0 |
| 25 | 490 | 90 | 0 |
| 30 | 204 | | |

3,000K, 90+ CRI, Narrow Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|------|
| 06' | 109.4 | 3.4' |
| 08' | 61.6 | 4.6' |
| 10' | 39.4 | 5.7' |
| 12' | 27.4 | 6.9' |
| 14' | 20.1 | 8.0' |
| 16' | 15.4 | 9.2' |

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

LUMINAIRE

| | | |
|-------------------|------------------|--------------|
| Performance 1 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 3,940 | / 1,294.3 |
| Watts | 120V | 277V |
| | 14W | 14.5W |
| Operating AMPS | 0.12A | 0.052A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 92.5 | |
| Spacing Criteria | 0.55 | |

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 | 107 | 104 | 102 | 100 | 99 | 97 | 97 | 97 | 97 |
| | 4 | 97 | 93 | 94 | 91 | 93 | 90 | 90 | 90 | 90 |
| | 6 | 90 | 85 | 88 | 84 | 86 | 83 | 83 | 83 | 83 |
| | 8 | 83 | 79 | 82 | 78 | 81 | 78 | 78 | 78 | 78 |
| | 10 | 78 | 73 | 77 | 73 | 76 | 72 | 72 | 72 | 72 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,236.5 | 95.5% |
| 0-40 | 1,294.2 | 100% |
| 0-60 | 1,294.3 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,294.3 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 65 | 0.59 |
| 6' | 36 | 0.33 |
| 7' | 25 | 0.23 |
| 8' | 25 | 0.23 |
| 9' | 16 | 0.15 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 3,940 | 40 | 2 |
| 5 | 3,712 | 50 | 0 |
| 10 | 3,055 | 60 | 0 |
| 15 | 2,111 | 70 | 0 |
| 20 | 1,232 | 80 | 0 |
| 25 | 644 | 90 | 0 |
| 30 | 293 | | |

Ardito LED - A4RAR

4" Series

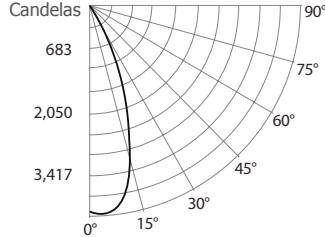
Ultra-Thin Profile Round Adjustable Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|-------|
| 06' | 74.8 | 4.3' |
| 08' | 42.1 | 5.7' |
| 10' | 26.9 | 7.1' |
| 12' | 18.7 | 8.5' |
| 14' | 13.7 | 10.0' |
| 16' | 10.5 | 11.4' |

Beam: 40°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|-------------------|------------------|--------|
| Performance 1 LED | 3,000K Flood | |
| CBCP / Lumens | 2,692 / 1,257.3 | |
| Watts | 120V | 277V |
| | 14W | 14.5W |
| Operating AMPS | 0.12A | 0.052A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 89.9 | |
| Spacing Criteria | 0.68 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | 50 | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 |
| | 2 | 106 | 103 | 101 | 99 | 98 | 96 |
| | 4 | 96 | 91 | 93 | 89 | 91 | 88 |
| | 6 | 87 | 82 | 85 | 81 | 84 | 80 |
| | 8 | 80 | 75 | 78 | 74 | 78 | 74 |
| | 10 | 74 | 69 | 73 | 69 | 72 | 68 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,170.6 | 93.1% |
| 0-40 | 1,255.4 | 99.9% |
| 0-60 | 1,257.3 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,257.3 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 62 | 0.58 |
| 6' | 35 | 0.33 |
| 7' | 24 | 0.23 |
| 8' | 24 | 0.23 |
| 9' | 16 | 0.15 |

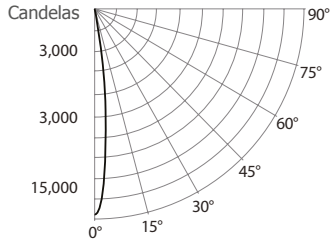
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/ VERTICAL | CANDELAS | DEGREES/ VERTICAL | CANDELAS |
|-------------------|----------|-------------------|----------|
| 0 | 2,692 | 40 | 11 |
| 5 | 2,715 | 50 | 0 |
| 10 | 2,508 | 60 | 0 |
| 15 | 1,952 | 70 | 0 |
| 20 | 1,329 | 80 | 0 |
| 25 | 847 | 90 | 0 |
| 30 | 391 | | |

3,000K, 90+ CRI, Spot, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|------|
| 06' | 478.9 | 1.5' |
| 08' | 269.4 | 2.1' |
| 10' | 172.4 | 2.6' |
| 12' | 119.7 | 3.1' |
| 14' | 87.9 | 3.6' |
| 16' | 67.3 | 4.1' |

Beam: 15°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|-------------------|------------------|--------|
| Performance 2 LED | 3,000K Spot | |
| CBCP / Lumens | 17,240 / 1,923 | |
| Watts | 120V | 277V |
| | 23W | 23.5W |
| Operating AMPS | 0.19A | 0.085A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 83.6 | |
| Spacing Criteria | 0.26 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | 50 | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 121 | 121 | 113 | 113 | 108 | 108 |
| | 2 | 110 | 107 | 105 | 103 | 103 | 101 |
| | 4 | 103 | 99 | 100 | 97 | 98 | 95 |
| | 6 | 96 | 93 | 94 | 91 | 93 | 91 |
| | 8 | 91 | 88 | 90 | 87 | 89 | 86 |
| | 10 | 87 | 84 | 86 | 83 | 86 | 83 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,883.2 | 97.9% |
| 0-40 | 1,922.6 | 100% |
| 0-60 | 1,923.0 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,923.0 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 97 | 1.02 |
| 6' | 55 | 0.57 |
| 7' | 38 | 0.4 |
| 8' | 38 | 0.4 |
| 9' | 24 | 0.25 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/ VERTICAL | CANDELAS | DEGREES/ VERTICAL | CANDELAS |
|-------------------|----------|-------------------|----------|
| 0 | 17,240 | 40 | 1 |
| 5 | 12,102 | 50 | 0 |
| 10 | 5,541 | 60 | 0 |
| 15 | 2,109 | 70 | 0 |
| 20 | 1,173 | 80 | 0 |
| 25 | 699 | 90 | 0 |
| 30 | 278 | | |

Ardito LED - A4RAR

4" Series

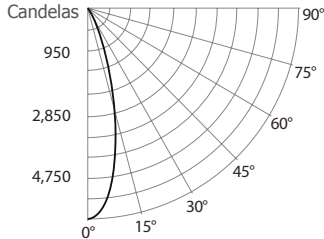
Ultra-Thin Profile Round Adjustable Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Narrow Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|------|
| 06' | 158.3 | 3.4' |
| 08' | 89.04 | 4.6' |
| 10' | 56.9 | 5.7' |
| 12' | 39.6 | 6.9' |
| 14' | 29.1 | 8.0' |
| 16' | 22.3 | 9.2' |

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

LUMINAIRE

| | | |
|--------------------------|------------------|--------------|
| Performance 2 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 5,699 | / 1,868.7 |
| Watts | 120V | 277V |
| | 23W | 23.5W |
| Operating AMPS | 0.19A | 0.085A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 81.2 | |
| Spacing Criteria | 0.55 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | 50 | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 |
| | 2 | 107 | 104 | 102 | 100 | 99 | 97 |
| | 4 | 97 | 93 | 94 | 91 | 93 | 90 |
| | 6 | 90 | 85 | 88 | 84 | 86 | 83 |
| | 8 | 83 | 79 | 82 | 78 | 81 | 78 |
| | 10 | 78 | 73 | 77 | 73 | 76 | 72 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,785.1 | 95.5% |
| 0-40 | 1,868.5 | 100% |
| 0-60 | 1,868.7 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,868.7 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 93 | 1.01 |
| 6' | 52 | 0.57 |
| 7' | 36 | 0.39 |
| 8' | 36 | 0.39 |
| 9' | 23 | 0.25 |

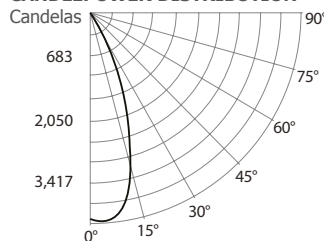
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/ VERTICAL | CANDELAS | DEGREES/ VERTICAL | CANDELAS |
|-------------------|----------|-------------------|----------|
| 0 | 5,699 | 40 | 2 |
| 5 | 5,377 | 50 | 0 |
| 10 | 4,410 | 60 | 0 |
| 15 | 3,039 | 70 | 0 |
| 20 | 1,777 | 80 | 0 |
| 25 | 931 | 90 | 0 |
| 30 | 407 | | |

3,000K, 90+ CRI, Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-------|
| 06' | 111.5 | 4.2' |
| 08' | 62.7 | 5.7' |
| 10' | 40.1 | 7.1' |
| 12' | 27.9 | 8.5' |
| 14' | 20.5 | 9.9' |
| 16' | 15.7 | 11.3' |

Beam: 40°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | | |
|--------------------------|------------------|-----------|
| Performance 2 LED | 3,000K | Flood |
| CBCP / Lumens | 4,012 | / 1,878.2 |
| Watts | 120V | 277V |
| | 23W | 23.5W |
| Operating AMPS | 0.19A | 0.085A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90+ | |
| Lumens/Watt | 81.7 | |
| Spacing Criteria | 0.98 | |

COEFFICIENT OF UTILIZATION - %

| Ceiling Reflect % | 80 | | 50 | | 30 | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|
| Wall Reflect % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 |
| | 2 | 106 | 103 | 101 | 99 | 98 | 96 |
| | 4 | 96 | 91 | 93 | 89 | 91 | 88 |
| | 6 | 87 | 82 | 85 | 81 | 84 | 80 |
| | 8 | 80 | 75 | 78 | 74 | 78 | 74 |
| | 10 | 74 | 69 | 73 | 69 | 72 | 68 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,747.1 | 93% |
| 0-40 | 1,875.4 | 99.8% |
| 0-60 | 1,878.2 | 100% |
| 60-90 | 0.0 | 0% |
| 0-90 | 1,878.2 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/ SQ. FT. |
|-------------------|---------------------|----------------|
| 5' | 93 | 1.01 |
| 6' | 52 | 0.57 |
| 7' | 36 | 0.39 |
| 8' | 36 | 0.39 |
| 9' | 23 | 0.25 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

| DEGREES/ VERTICAL | CANDELAS | DEGREES/ VERTICAL | CANDELAS |
|-------------------|----------|-------------------|----------|
| 0 | 4,012 | 40 | 19 |
| 5 | 4,053 | 50 | 0 |
| 10 | 3,761 | 60 | 0 |
| 15 | 2,915 | 70 | 0 |
| 20 | 1,974 | 80 | 0 |
| 25 | 1,268 | 90 | 0 |
| 30 | 582 | | |