

## SPECIFICATION SHEET

# Ardito LED - A3RFD

## (DL3RFD)

### 3-1/2" Series

#### Ultra-Thin Profile Round Trim with Frosted Glass Tube

Project \_\_\_\_\_

Notes \_\_\_\_\_

Fixture Type \_\_\_\_\_

Date \_\_\_\_\_



**WITH FLANGE**

A3RFD-12BRXX (illustrated)  
(DL3RFD-12BRXX)



**FLANGELESS TRIM**

A3RFD-TR12BRXX (illustrated)  
(DL3RFD-TR12BRXX)

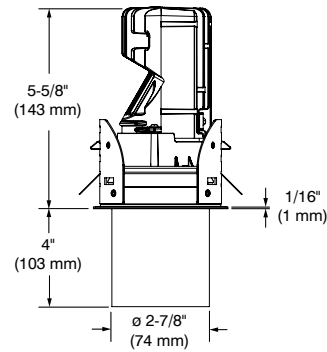
Aluminum Round, 3-1/2" high efficiency decorative dimmable LED downlight trim. May be installed with a low profile ultra-thin flange or flangeless trim in configuration for insulated, non-insulated and remodel (non-IC) ceilings.



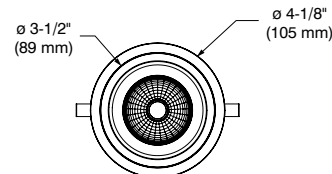
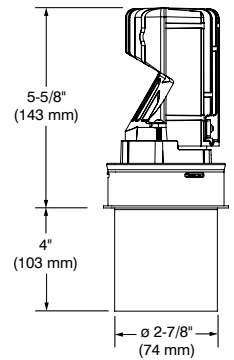
## SPECIFICATIONS

|                |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TRIM DETAILS   | <p>Requires a 6" (152 mm) clearance beyond the ceiling level for standard using and 6-1/2" (165 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> |
| HEAT SINK      | High quality injection molded aluminum heat sink ensuring maximum heat dissipation for optimal performance.                                                                                                                                                                                                                                                                                                      |
| CEILING CUTOUT | <b>ø 3-3/4" (95 mm)</b>                                                                                                                                                                                                                                                                                                                                                                                          |
| CERTIFICATION  | <ul style="list-style-type: none"> <li>cULus <b>E343977</b> for damp locations</li> <li>Certified Air Tight ASTM E283</li> </ul>                                                                                                                                                                                                                                                                                 |
| WARRANTY       | <p>1 year on components against manufacturing defects</p> <p>5 years on LED arrays and drivers</p>                                                                                                                                                                                                                                                                                                               |

**WITH FLANGE**



**FLANGELESS TRIM**



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# Ardito LED - A3RFD

## (DL3RFD)

3-1/2" Series

### Ultra-Thin Profile Round Trim with Frosted Glass Tube



#### 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) - 795 lumens @ 3,000K, 58.5 lm/W  
Performance 2 (23W) - 1,153 lumens @ 3,000K, 50 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](http://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 programming of up to 5 scenes. The App. can be used to override the cabled system.

Consult Lumenetix Website ([www.lumenetix.com](http://www.lumenetix.com)) and refer to the documentation for the CTM119 module for more information.



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## SPECIFICATION SHEET

# Ardito LED - A3RFD

## (DL3RFD)

### 3-1/2" Series

## Ultra-Thin Profile Round Trim with Frosted Glass Tube



## SPECIFICATIONS (CONT'D)

COMPATIBLE  
HOUSINGS

|                            | Remodel<br>Housing | New<br>Construction<br>Housing | Insulated<br>Housing | Insulated<br>Air Tight<br>Housing (Title 24) | Ceiling thickness suggested for<br>insulated housing as a using standard<br>and Lumenetix option                                                                                                           |
|----------------------------|--------------------|--------------------------------|----------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Performance 1 (14W)</b> | REA3V1             | NWA3RV1                        | *ISA3RV1             | ICAT6R3-ARV1                                 | * Ceiling thickness must be at least 1/4" (6.4 mm)<br>for insulated housing as a using standard.<br><br>** Ceiling thickness must be at least 3/4" (19 mm)<br>for insulated housing with Lumenetix option. |
| <b>Performance 2 (23W)</b> | REA3V2             | NWA3RV2                        | *ISA3RV2             | ICAT6R3-ARV2                                 |                                                                                                                                                                                                            |
| <b>Lumenetix (12.5W)</b>   | REA3VL             | NWA3RVL                        | **ISA3RVL            |                                              |                                                                                                                                                                                                            |

For dimming, please visit our Web site frequently to find our suggested compatible dimmers: [www.contrastlighting.com](http://www.contrastlighting.com)

## OPTIC SYSTEM

Interchangeable optional lenses available to customize your lighting.

**Choice of available lenses:**

**Stackable (up to 2) (also sold separately)**

**Clear (C)**

**Frosted (F)**

**Standard**

|                 |     |
|-----------------|-----|
| Medium Spot (S) | 19° |
|-----------------|-----|

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

FLANGE AND  
LIGHT ENGINE  
FINISHES

Powder coat painted or plated die formed steel.

**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)**

FLANGELESS TRIMS  
(OPTION)

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

Mud-in-plate sold separately.

**Ordering code: MIPA3R**

Consult housing specification sheet for more details.



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## SPECIFICATION SHEET

# Ardito LED - A3RFD

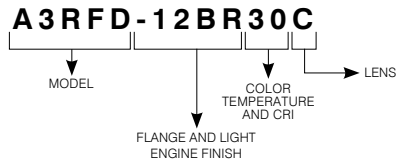
## (DL3RFD)

### 3-1/2" Series

## Ultra-Thin Profile Round Trim with Frosted Glass Tube



## TRIM WITH FLANGE CODIFICATION EXAMPLE

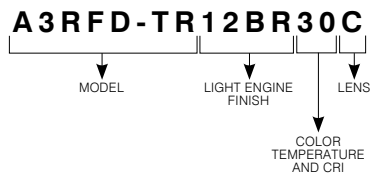


Options in red may generate a longer production lead time.

TRIM WITH FLANGE ORDERING CODES **A3RFD**

| MODEL                           | TRIM AND LIGHT ENGINE FINISHES |                 | COLOR TEMPERATURES AND CRI |                            | LENSES   |         |
|---------------------------------|--------------------------------|-----------------|----------------------------|----------------------------|----------|---------|
|                                 |                                |                 |                            |                            |          |         |
| <b>A3RFD</b><br><b>(DL3RFD)</b> | <b>-04BR</b>                   | Brushed Chrome  | <b>27</b>                  | 2,700K (90+ CRI)           | <b>C</b> | Clear   |
|                                 | <b>-11</b>                     | Matte White     | <b>30</b>                  | 3,000K (90+ CRI)           | <b>F</b> | Frosted |
|                                 | <b>-12BR</b>                   | Brushed Nickel  | <b>35</b>                  | 3,500K (90+ CRI)           |          |         |
|                                 | <b>-22</b>                     | Matte Black     | <b>40</b>                  | 4,000K (90+ CRI)           |          |         |
|                                 | <b>-25</b>                     | Polar Grey      | <b>CT</b>                  | 1,650K to 4,000K (90+ CRI) |          |         |
|                                 | <b>-03</b>                     | 24K Gold Plated | <b>WD</b>                  | 3,050K to 1,800K (90+ CRI) |          |         |
|                                 | <b>-04</b>                     | Chrome          |                            |                            |          |         |
|                                 | <b>-13</b>                     | 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 **A3RFD-TR**

| MODEL                                 | LIGHT ENGINE FINISHES |                 | COLOR TEMPERATURES AND CRI |                            | LENSES   |         |
|---------------------------------------|-----------------------|-----------------|----------------------------|----------------------------|----------|---------|
|                                       |                       |                 |                            |                            |          |         |
| <b>A3RFD-TR</b><br><b>(DL3RFD-TR)</b> | <b>04BR</b>           | Brushed Chrome  | <b>27</b>                  | 2,700K (90+ CRI)           | <b>C</b> | Clear   |
|                                       | <b>11</b>             | Matte White     | <b>30</b>                  | 3,000K (90+ CRI)           | <b>F</b> | Frosted |
|                                       | <b>12BR</b>           | Brushed Nickel  | <b>35</b>                  | 3,500K (90+ CRI)           |          |         |
|                                       | <b>22</b>             | Matte Black     | <b>40</b>                  | 4,000K (90+ CRI)           |          |         |
|                                       | <b>25</b>             | Polar Grey      | <b>CT</b>                  | 1,650K to 4,000K (90+ CRI) |          |         |
|                                       | <b>03</b>             | 24K Gold Plated | <b>WD</b>                  | 3,050K to 1,800K (90+ CRI) |          |         |
|                                       | <b>04</b>             | Chrome          |                            |                            |          |         |
|                                       | <b>13</b>             | Satin Nickel    |                            |                            |          |         |



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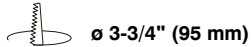
## 3-1/2" Series (DL3RFD)

### Ultra-Thin Profile Round Trim with Frosted Glass Tube

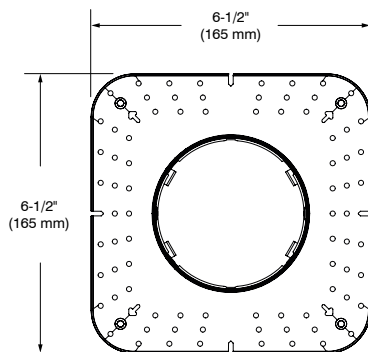


#### MUD-IN-PLATE

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



Code: MIPA3R



#### ORDERING CODES for replacement lenses

For future on-site modifications of the light distribution.

#### Lenses (to modify light diffusion)

**Stackable (up to 2)**

Clear (C): **104036**

Frosted (F): **317240**



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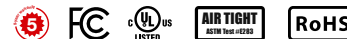
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## 3-1/2" Series (DL3RFD)

### Ultra-Thin Profile Round Trim with Frosted Glass Tube

### 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)

|                            | Medium Spot (19°) |           |
|----------------------------|-------------------|-----------|
| <b>2,700K with 90+ CRI</b> | 771 lm            | 55.1 lm/W |
| <b>3,000K with 90+ CRI</b> | 799 lm            | 57.1 lm/W |
| <b>3,500K with 90+ CRI</b> | 838 lm            | 59.9 lm/W |
| <b>4,000K with 90+ CRI</b> | 859 lm            | 61.4 lm/W |

#### WITH PERFORMANCE 2 HOUSING (23W)

|                            | Medium Spot (19°) |           |
|----------------------------|-------------------|-----------|
| <b>2,700K with 90+ CRI</b> | 1,118 lm          | 48.6 lm/W |
| <b>3,000K with 90+ CRI</b> | 1,159 lm          | 50.4 lm/W |
| <b>3,500K with 90+ CRI</b> | 1,215 lm          | 52.8 lm/W |
| <b>4,000K with 90+ CRI</b> | 1,246 lm          | 54.2 lm/W |

#### WITH PERFORMANCE L HOUSING (12.5W)

|                                       | Medium Spot (19°) |           |
|---------------------------------------|-------------------|-----------|
| <b>Warm Dimming (WD) with 90+ CRI</b> | 394 lm            | 31.5 lm/W |
| <b>Color Tuning (CT) with 90+ CRI</b> | 413 lm            | 33 lm/W   |

| Lens Factors |      |
|--------------|------|
| <b>C</b>     | 1    |
| <b>F</b>     | 0.71 |



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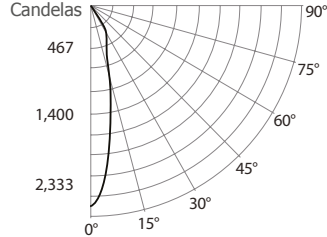
Ultra-Thin Profile Round Trim with Frosted Glass Tube

## PHOTOMETRIC DATA



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

## CANDLEPOWER DISTRIBUTION



## LIGHT CONE

| Distance | FC   | DIA  |
|----------|------|------|
| 06'      | 72.2 | 2.2' |
| 08'      | 40.6 | 3.0' |
| 10'      | 26.0 | 3.7' |
| 12'      | 18.1 | 4.5' |
| 14'      | 13.3 | 5.2' |
| 16'      | 10.2 | 5.9' |

**Beam: 19°**  
Beam Edge defined as 50%  
of Maximum Nadir Candle-power.

## LUMINAIRE

|                          |                        |
|--------------------------|------------------------|
| <b>Performance 1 LED</b> | 3,000K Flood           |
| <b>CBCP / Lumens</b>     | 2 600 / 797.5          |
| <b>Watts</b>             | 120V 277V<br>14W 14.5W |
| <b>Operating AMPS</b>    | 0.12A 0.052A           |
| <b>Lumen Maintenance</b> | L70 @ 50,000 Hrs       |
| <b>CRI</b>               | 90+                    |
| <b>Lumens/Watt</b>       | 56.9                   |
| <b>Spacing Criteria</b>  | 0.33                   |

## 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  | 100 | 95  | 95  | 91  | 91  | 88  |
|                   | 4  | 87  | 80  | 83  | 78  | 81  | 77  |
|                   | 6  | 77  | 71  | 75  | 70  | 73  | 69  |
|                   | 8  | 70  | 64  | 68  | 63  | 67  | 63  |
|                   | 10 | 65  | 59  | 63  | 58  | 63  | 58  |

## Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

## ZONAL LUMEN SUMMARY

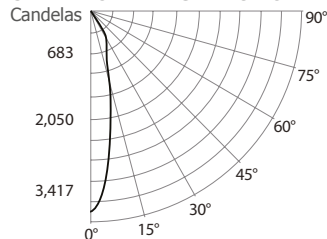
| ZONE  | LUMENS | %LUMINAIRE |
|-------|--------|------------|
| 0-30  | 537.8  | 67.3%      |
| 0-40  | 595.9  | 74.6%      |
| 0-60  | 709.1  | 88.8%      |
| 60-90 | 88.5   | 11.1%      |
| 0-90  | 797.5  | 100%       |

## CANDELAS DISTRIBUTION

| DEGREES/<br>VERTICAL | CANDELAS | DEGREES/<br>VERTICAL | CANDELAS |
|----------------------|----------|----------------------|----------|
| 0                    | 2,600    | 40                   | 89       |
| 5                    | 2,079    | 50                   | 67       |
| 10                   | 1,176    | 60                   | 48       |
| 15                   | 564      | 70                   | 33       |
| 20                   | 436      | 80                   | 21       |
| 25                   | 269      | 90                   | 7        |
| 30                   | 95       |                      |          |

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

## CANDLEPOWER DISTRIBUTION



## LIGHT CONE

| Distance | FC     | DIA  |
|----------|--------|------|
| 06'      | 107.02 | 2.2' |
| 08'      | 60.2   | 3.0' |
| 10'      | 38.5   | 3.7' |
| 12'      | 26.8   | 4.5' |
| 14'      | 19.7   | 5.2' |
| 16'      | 15.1   | 6.0' |

**Beam: 19°**  
Beam Edge defined as 50%  
of Maximum Nadir Candle-power.

## LUMINAIRE

|                          |                        |
|--------------------------|------------------------|
| <b>Performance 2 LED</b> | 3,000K Flood           |
| <b>CBCP / Lumens</b>     | 3,853 / 1,153.6        |
| <b>Watts</b>             | 120V 277V<br>23W 23.5W |
| <b>Operating AMPS</b>    | 0.19A 0.085A           |
| <b>Lumen Maintenance</b> | L70 @ 50,000 Hrs       |
| <b>CRI</b>               | 90+                    |
| <b>Lumens/Watt</b>       | 82.4                   |
| <b>Spacing Criteria</b>  | 0.33                   |

## 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  | 100 | 95  | 95  | 92  | 92  | 89  |
|                   | 4  | 87  | 81  | 84  | 79  | 82  | 78  |
|                   | 6  | 78  | 72  | 76  | 71  | 74  | 70  |
|                   | 8  | 71  | 65  | 69  | 64  | 68  | 64  |
|                   | 10 | 66  | 60  | 64  | 59  | 64  | 59  |

## Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

## ZONAL LUMEN SUMMARY

| ZONE  | LUMENS  | %LUMINAIRE |
|-------|---------|------------|
| 0-30  | 797.0   | 69%        |
| 0-40  | 881.2   | 76.3%      |
| 0-60  | 1,040.7 | 90.1%      |
| 60-90 | 113.0   | 9.8%       |
| 0-90  | 1,153.6 | 100%       |

## CANDELAS DISTRIBUTION

| DEGREES/<br>VERTICAL | CANDELAS | DEGREES/<br>VERTICAL | CANDELAS |
|----------------------|----------|----------------------|----------|
| 0                    | 3,853    | 40                   | 127      |
| 5                    | 3,084    | 50                   | 95       |
| 10                   | 1,748    | 60                   | 66       |
| 15                   | 835      | 70                   | 43       |
| 20                   | 643      | 80                   | 24       |
| 25                   | 395      | 90                   | 7        |
| 30                   | 138      |                      |          |



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