

# Atmosphere 2.5"

## Invisible Trim Housing



### SPECIFICATIONS

**Input:** Universal 120 - 277V AC 50/60 Hz

**Standards:** ETL & cETL, IC-rated, Airtight (see below for list)

**Dimming:** 2 Channel 0-10V: 100-0.1%;  
2 Channel DMX 512 RDM: 100-0.1%  
Linear dimming, 1st input channel intensity changing, 2nd input channel is CCT changing.

**Mounting:** New construction housings included with universal mounting brackets and hanger bars  
Ceiling cut out (Round): Ø 4 1/4"  
Ceiling cut out (Square): 4 1/4" x 4 1/4"  
See next page for ceiling thickness information

**Fixture Type:** \_\_\_\_\_

**Catalog Number:** \_\_\_\_\_

**Project:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Construction:** 20 Gauge cold rolled steel  
Diecast spackle flange included

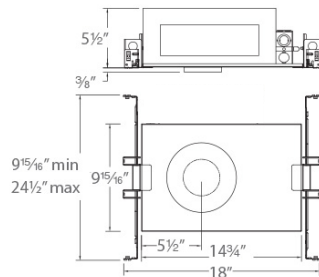
**Warranty:** 5 year WAC Lighting product warranty

### HOUSINGS

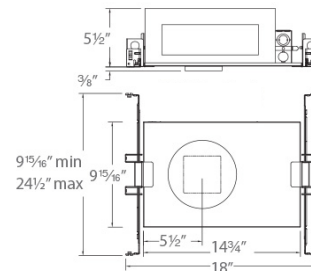
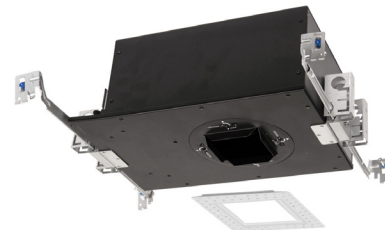
|                  | Model           |                 | Power          | Rating                                 | Driver                 |
|------------------|-----------------|-----------------|----------------|--|------------------------|
| New Construction | <b>A1RA-247</b> | Round           | 1 15W<br>2 22W | IC rated, Airtight<br>Non-IC, Airtight | CT-X DMX<br>CT-Z 0-10V |
| New Construction | <b>A1RA-257</b> | Square          | 1 15W<br>2 22W | IC rated, Airtight<br>Non-IC, Airtight | CT-X DMX<br>CT-Z 0-10V |
| Remodel          | <b>A1RA-366</b> | Round or Square | 1 15W<br>2 22W | Non-IC<br>Non-IC                       | CT-X DMX<br>CT-Z 0-10V |

Example: **A1RA-2472-CT-Z**

Round New Construction



Square New Construction



aispire.com  
Phone (800) 526.2588  
Fax (800) 526.2585

Headquarters/Eastern Distribution Center  
44 Harbor Park Drive  
Port Washington, NY 11050

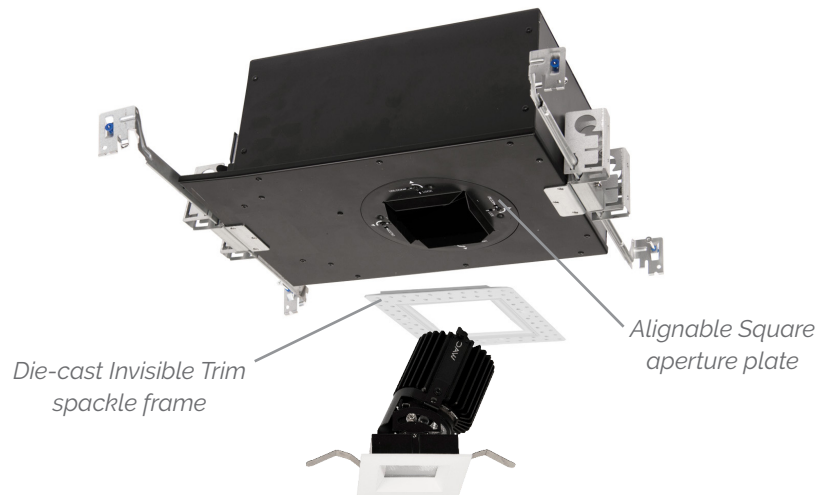
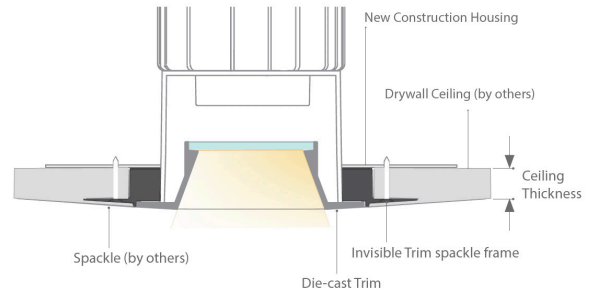
Central Distribution Center  
1600 Distribution Ct  
Lithia Springs, GA 30122

Western Distribution Center  
1750 Archibald Avenue  
Ontario, CA 91760



## INVISIBLE TRIM INSTALLATION

| Trim Model                     | Trim Description              | Ceiling Thickness |             |             |
|--------------------------------|-------------------------------|-------------------|-------------|-------------|
|                                |                               | 1/2"              | 1"          | 1 1/2"      |
| <b>A1RA-D</b>                  | <i>Downlight</i>              | Yes               | Yes         | Yes         |
| <b>A1RA-S</b>                  | <i>Shallow Regressed Trim</i> | Yes               | Yes         | Yes         |
| <b>A1RA-A</b><br><b>A1RA-P</b> | <i>Adjustable/ Pinhole</i>    | Yes, to 45°       | Yes, to 35° | Yes, to 20° |
| <b>A1RA-W</b>                  | <i>Wall Wash</i>              | Yes               | Yes         | No          |



## What is Human Centric Lighting (HCL)

- Throughout evolution, the human visual system has evolved under the natural light of sun and fire.
- Human-centric lighting by definition encompasses the effects of lighting on the physical and emotional being of people.
- As part of the HCL initiative, there is a drive to develop "natural" sources of lighting. The human species has been conditioned to function in daylight hours by the light of the sun, and after dusk, of the warm glow of fire. Thus, we define natural light sources as those which match the spectral distribution of sunlight and firelight.

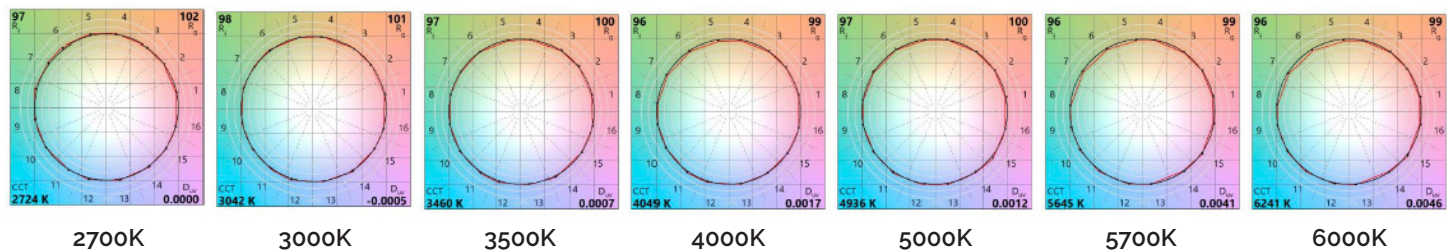
## Human Centric Light Spectrum

| FEATURES  | BENEFITS  |
|---|---|
| Spectrum engineered to closely emulate natural light with reduced short blue wavelength intensity | Full, consistent light spectrum with fewer spectral spikes, the closest match to natural light available                  |
| Natural and vivid color rendering   | Typical g7 CRI with R1-R15 values ranging from g1 to g9 Excellent TM-30 metrics; Rf ranging form 94-97 and Rg from 98-104 |
| High efficacy human-centric spectra   | Greater energy savings, lower utility and environment costs   |
| Affordable spectra optimized for humans   | Accelerate adoption of full spectrum natural lighting   |

## Excellent Color Rendering and TM-30 Metrics

| CCT   | Rf | Rg  | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|-------|----|-----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| 2700K | 95 | 103 | 97 | 99 | 94 | 94 | 97 | 98 | 97 | 98 | 99 | 97  | 91  | 98  | 98  | 95  | 98  |
| 3000K | 95 | 104 | 98 | 99 | 93 | 94 | 97 | 98 | 96 | 96 | 97 | 96  | 92  | 95  | 98  | 95  | 97  |
| 3500K | 95 | 98  | 98 | 98 | 97 | 98 | 98 | 98 | 98 | 97 | 93 | 97  | 97  | 95  | 98  | 97  | 98  |
| 4000K | 97 | 100 | 99 | 99 | 97 | 99 | 99 | 99 | 99 | 98 | 94 | 97  | 99  | 96  | 99  | 98  | 98  |
| 5000K | 97 | 100 | 98 | 99 | 98 | 98 | 98 | 98 | 99 | 96 | 95 | 98  | 98  | 98  | 98  | 98  | 97  |
| 5700K | 94 | 98  | 98 | 98 | 97 | 95 | 98 | 97 | 96 | 95 | 92 | 97  | 96  | 98  | 98  | 98  | 97  |
| 6000K | 95 | 98  | 98 | 98 | 97 | 96 | 98 | 98 | 96 | 96 | 93 | 97  | 96  | 98  | 98  | 98  | 97  |

Note: Typical 85C hot values shown, slight differences may exist

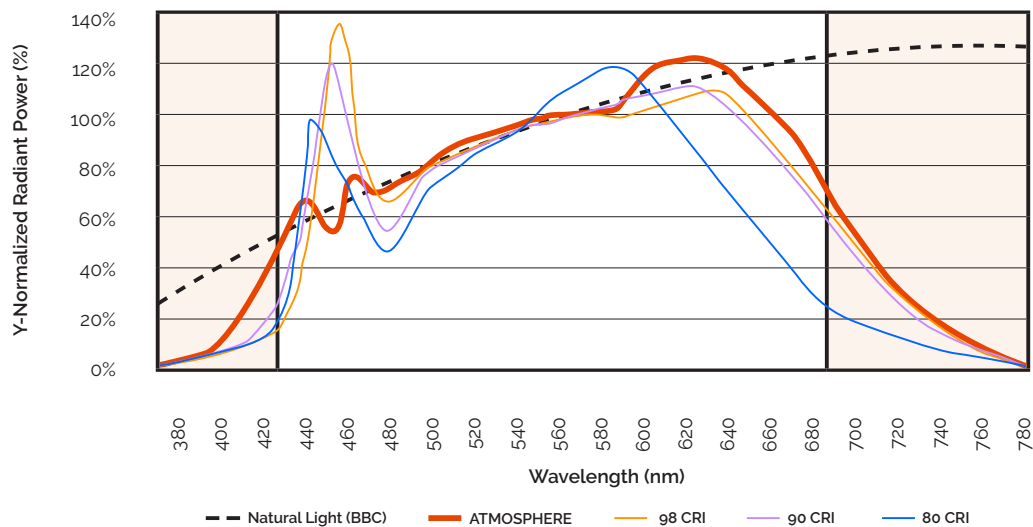




## Spectral Matching to Natural Light

- As close of a spectral match as possible to natural light
- Standard LED light sources spectral distribution (SPD) have larger deviations from the Blackbody Curve (BBC)
- ATMOSPHERE significantly reduces the blue spike and cyan valley to deliver a closer match to natural light

**4000K Spectral Comparison BBC vs LED**



*SPD's of LED light sources at 4000K against the blackbody curve.*

These examples deviate from the natural light that humans have evolved under for millions of years. It is recommended to work within the realm of natural light to avoid tweaking circadian rhythms until the effects on humans are understood.