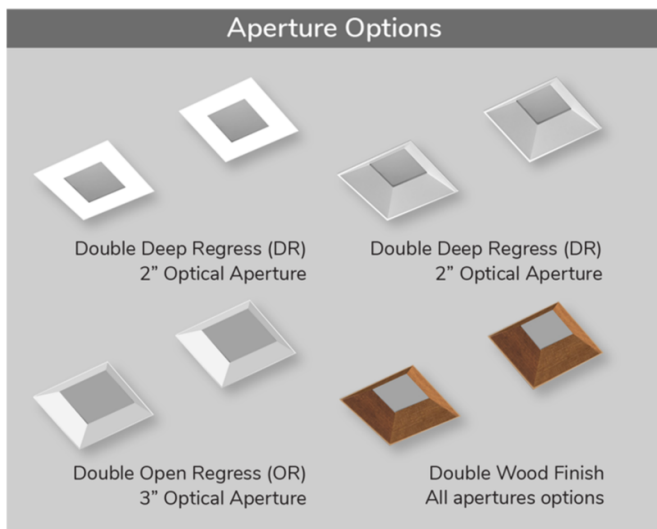
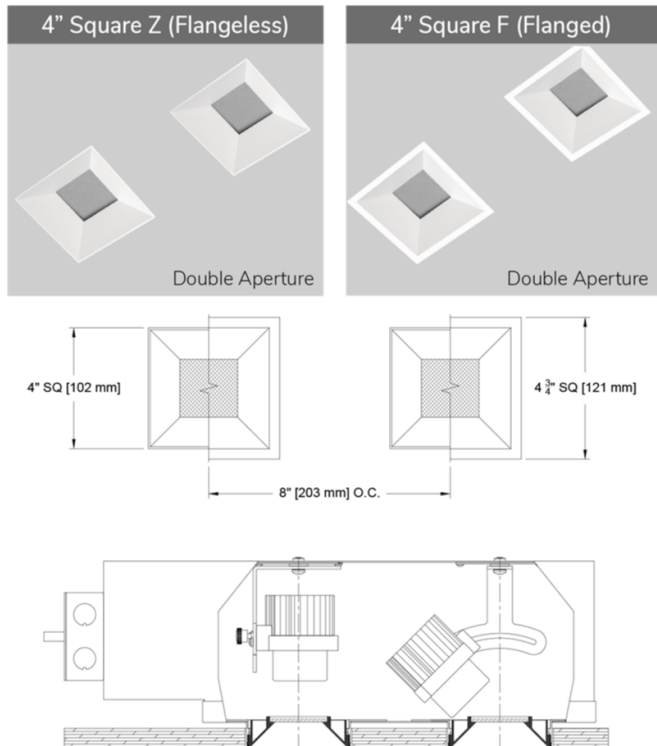


# Core 4" Square Double Adjustable Downlight (102mm - 8" on center)

2 Aperture Adjustable Recessed Accent/Downlight

## The Core Family

When one Core is not enough, you can make it a double. Need more light, or savings on installation costs, this 8" on center dual aperture fixture delivers a rich diversity of technical and aesthetic options including 3 trim aperture types, over 14 finishes including custom wood trims, flux and source selections featuring 90+ CRI fixed white and our world class Ambient Dim (Warm Dim), multiple beam spreads and plethora of driver and control choices. The Core downlight is created on a platform allowing a high degree of modification, so if you don't see what you are looking for, just ask for it.



PROJECT:

TYPE:

SPECIFIER:

DATE:

### Key Points (CR4MD-SMDL)

#### Trim

- Flanged or Flangeless
- Plaster Mount allows installation from below with large plaster flange and lip
- 14 color options + custom RAL or wood available
- One-piece die cast aluminum or machined wood trim

#### Source / Optics

- 2400K, 2700K, 3000K, 3500K, 4000K  
Ambient Dim, RGBW & Tunable White options
- 90 CRI, 60+ R9 Standard-  
95 CRI 90+R9 Optional with Ambient Dim
- <2 MacAdam Steps (<2SDCM) for fixed white
- Up to 4200 delivered lumens with  
both apertures and C28 source selection
- Adjustable to 45° with 358° of rotation
- 4 beamspreads available- 15°, 24°, 40°, and 55°

#### Housing

- Heavy gauge aluminum for new construction or remodel
-  Compliant to  with Airtight Housing
-  Listed – Damp or wet with shower trim
- Approved for 8 (4-in / 4-out) #12 AWG conductors rated for 90°C through wiring
- IC Rated / Airtight Housing approved for use in direct contact with insulation – Chicago Plenum Available

#### Driver

- TruPhase™ Dimming to 0.1% available
- Universal 120-277v
- Prewired and integral to housing
- Flicker free to IEEE 1798-2015 available with EldoLED and TruPhase™ selections
- TruPhase™, 0-10, DALI-2, DMX, Ecosystem or Wireless Control

Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: CR4MD-SMDL-DR-Z-APM-C20-35-24-E2-2C-D-91A-97L-CP

| FIXTURE                                    | APERTURE                                                                      | TRIM                                                                                                                                                                                                                                                                                           | MOUNTING                                                                                                                                                                                                                                                                                                                        | SOURCE / WATTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CCT                                                                                                                                                                                                                                                                                                                                                                                              | BEAM                                                                | DRIVER / CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CIRCUITS                         | TRIM FINISH                                                                                                                                                                                                                                                               | LENS ACCESSORIES                                                                                                                                                                                                                                                                                                                                                                          | ACCESSORIES                                                                                                                                                                                                                                        |
|--------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CR4MD-SMDL                                 |                                                                               |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                  |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                    |
| Core 4" Square Double Adjustable Downlight | DR Double Deep Regress<br>OR Double Open Regress<br>FL Double Flat (Pin Hole) | Flanged Trims<br><br>F Flanged Trim<br><br>FS Flanged Shower Trim*<br><br>(for mounting choose from Flanged Housings)<br><br>Flangeless Trims<br><br>Z Flangeless Trim<br><br>ZS Flangeless Shower Trim*<br><br>(for mounting choose from Flangeless Housings)<br><br>* Aperture Lens Required | Flanged Housings<br><br>U Universal - Non IC Housing<br><br>AU Airtight Universal IC-Rated<br><br>AP Airtight Plaster IC-Rated<br><br>Flangeless Housings<br><br>P Plaster - Non-IC Housing<br><br>PM Panel Mount<br><br>APM Airtight Panel Mount IC-Rated<br><br>California Title Compliant<br>*Cannot be used with C28 Source | Citizen<br><br>C14 15W 995Lm** 90+CRI, 60+R9<br><br>C20 21W 1326Lm** 90+CRI, 60+R9<br><br>C28 30W*† 1857Lm** 90+CRI, 60+R9<br><br>Tunable<br><br>T9 90+CRI, 60+R9 Tunable White<br><br>T20 21W 90+CRI, 60+R9 Tunable White<br><br>RGBW 90+CRI, 60+R9<br><br>Ambient Dim™<br><br>A14 15W 656Lm 95+CRI, 90+R9<br><br>A20 21W 95+CRI, 90+R9<br><br>California Title 24 Compliant to JA8.<br>* Requires Active Cooling and not compatible with IC/Airtight housing. Not compatible with L2 and LP drivers.<br>†Does not Meet CA Title 24 with Flat aperture. | 24 2400K<br><br>30 3000K<br><br>35 3500K<br><br>40 4000K<br><br>27 2700K<br><br>Tunable<br><br>TW1840 1800-4000K Tunable White w/ E1, E2, E3, E4<br><br>TW2765 2700-6500K Tunable White w/ E1, E2, E3, E4<br><br>RG1280 1200-8000K RGBW Dynamic Color Changing *Requires E2 or E4<br><br>Ambient Dim™<br><br>2722* 2700-2200K *A14 Only<br><br>3019 3000-1900K<br><br>3022* 3000-2200K *A14 Only | 15 Spot<br><br>24 Narrow Flood<br><br>40 Flood<br><br>55 Wide Flood | C1 0-10 1.0%, UNV (120-277V) linear<br><br>C2 ELV/Triac 1.0%, (120V) linear<br><br>E1 0-10 0.1%, UNV (120-277V) log<br><br>E2 DALI-2 0.1%, UNV (120-277V) log<br><br>E3 0-10 0.1%, UNV (120-277V) linear<br><br>E4^ DMX 0.1%, UNV (120-277V) Universal DMX Driver/Controller RGBW-DMX ^ INCLUDES DMX/RDM COMPATIBLE DRIVER WITH BUILT-IN DECODER - CONTROLLER BY OTHERS<br><br>LD Digital Ecosystem 1.0%, UNV (120-277V) ECO Hi-Lume SoftOn/Fade-to-Black LDE1<br><br>TR2 TruPhase™ 0.1%, (120-120V) log Up to 20W Forward and Reverse compatible Phase Dimming Static White & Ambient Dim only<br><br>* Not compatible with C28 Source | 1C 1 Circuit<br><br>2C 2 Circuit | W White Paint<br><br>B Black Paint<br><br>D Wood*<br><br>PXX Specialty Paint Color* P01-P15<br><br>C Custom/RAL Color**<br><br>*Wood "D" Selection to be used with Z trim and PM mounting<br>**See Specialty Finish Guide<br><br>FINISH GUIDE LINK<br><br>WOOD TRIM GUIDE | Aperture Lens<br><br>91A Solite<br><br>93A Frosted<br><br>XXA Other Aperture Lens Treatments*<br><br>Reflector (lamp) Media<br><br>91L Solite<br><br>93L Frosted<br><br>97L Black Hexcel Louver<br><br>XXL Other reflector (lamp) media*<br><br>1 piece of Media per opening (aperture or reflector) can be selected<br>*See Lens Accessory Guide<br><br>LENS ACCESSORY VISUAL GUIDE LINK | CP Chicago Plenum<br><br>EM Emergency Pack* *Remote Required<br><br>CA Casambi Wireless BLE to be paired with driver<br><br>Controls<br><br>LR Lutron Wireless RF PowPak<br><br>ATH Lutron Athena Wireless Node<br><br>Must be used with E2 driver |

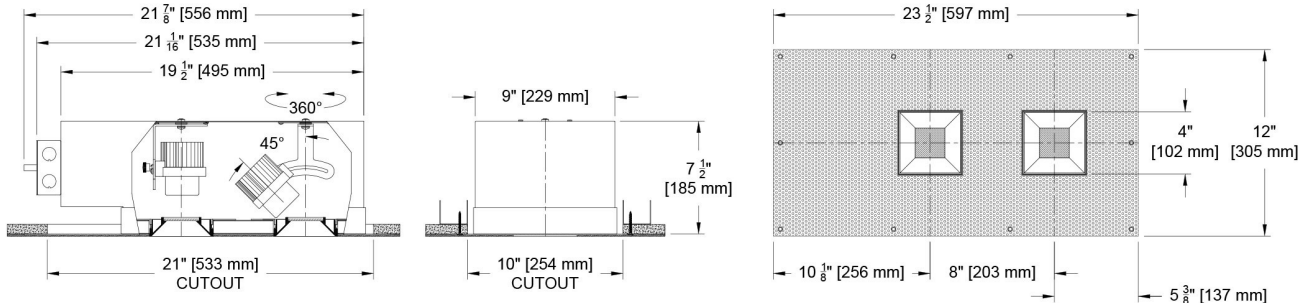
# Ceiling Cutouts and Dimensions

Deep Regress Shown - other apertures similar

## 4" Square Flangeless Housing

### Plaster Mount (P/AP)

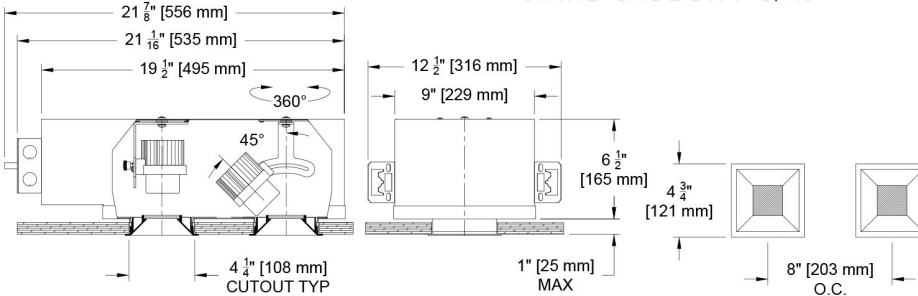
CR4MD-SMDL-DR-Z-P/AP



## 4" Square Flanged Housing

### Flanged Mount (U/AU)

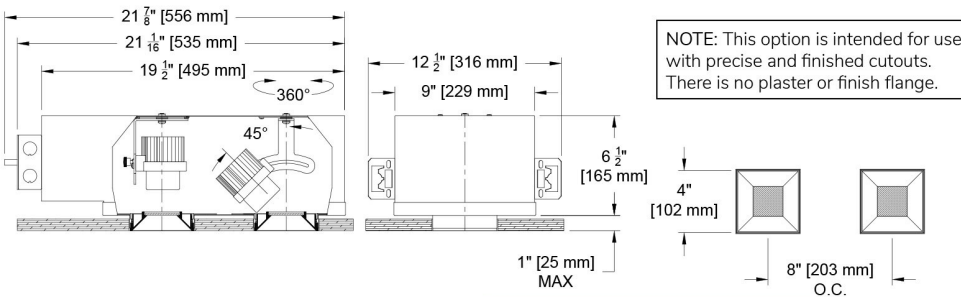
CR4MD-SMDL-DR-F-U/AU



## 4" Square Flangeless Housing

### Flangeless Mount (U/AU)

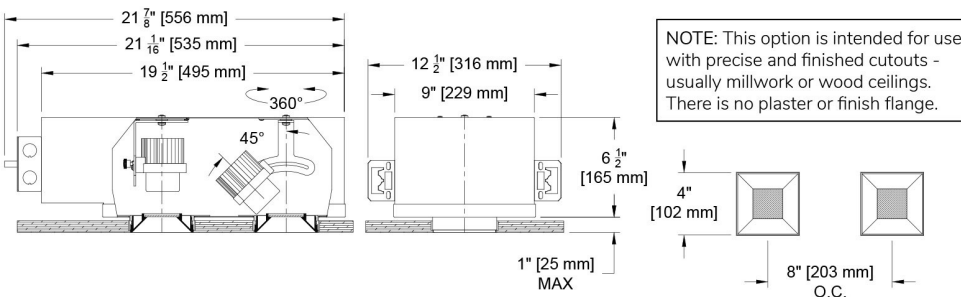
CR4MD-SMDL-DR-Z-U/AU



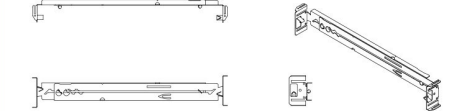
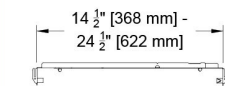
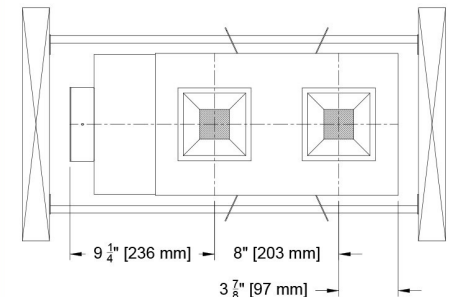
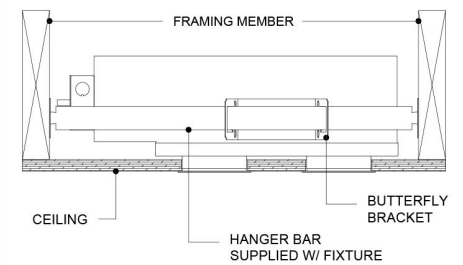
## 4" Square Flangeless Housing

### Panel Mount (PM/APM)

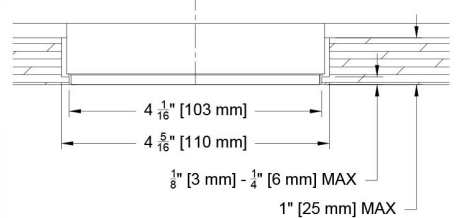
CR4MD-SMDL-DR-Z-PM/APM



## Hanger Bar Detail



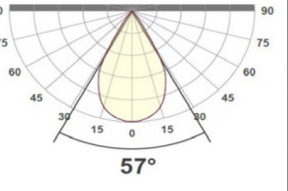
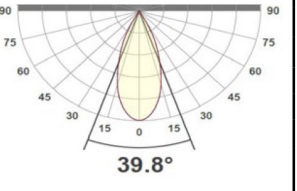
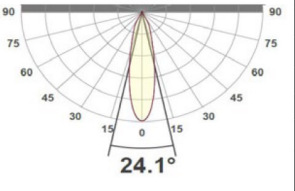
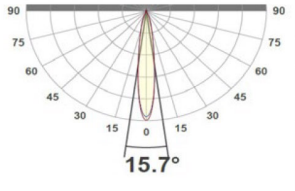
## Panel Trim Detail



Photometric Table

Values are based on a single aperture CR4D-SA. Calculations will require placing the second head (file) 8" on center from the first placed IES file. All Measurements are delivered or derived delivered lumens based on 3000k. Ambient dim at full output. C28 source requires active cooling and must be used with NIC housing for required airflow. Flat (Pin Hole) aperture wide beams experience significant beam clipping - refer to PDF report for exact FWHM beam angle. All values can vary +/-10% from source manufacturer rated flux range.

| SQUARE Beamspreads                  |                 |                  | 15°                   |              |         |           | 24°                   |              |         |           | 40°                   |              |         |           | 55°                   |           |         |           |
|-------------------------------------|-----------------|------------------|-----------------------|--------------|---------|-----------|-----------------------|--------------|---------|-----------|-----------------------|--------------|---------|-----------|-----------------------|-----------|---------|-----------|
| Source                              |                 | System watts (W) | Delivered Lumens (lm) | Lumens/ Watt | Peak cd | 10% Field | Delivered Lumens (lm) | Lumens/ Watt | Peak cd | 10% Field | Delivered Lumens (lm) | Lumens/ Watt | Peak cd | 10% Field | Delivered Lumens (lm) | Lms/ Watt | Peak cd | 10% Field |
| Deep Regress                        | Citizen C14     | 15               | 1068                  | 71           | 7642    | 42°       | 995                   | 66           | 4174    | 46°       | 1037                  | 69           | 3429    | 51°       | 996                   | 66        | 1402    | 71°       |
|                                     | Citizen C20     | 21               | 1424                  | 68           | 10190   | 40°       | 1326                  | 63           | 5562    | 39°       | 1382                  | 66           | 4570    | 55°       | 1328                  | 63        | 1870    | 73°       |
|                                     | Citizen C28*    | 30               | 1848                  | 62           | 13223   | 44°       | 1857                  | 62           | 7791    | 47°       | 1916                  | 64           | 6336    | 54°       | 1816                  | 61        | 2556    | 69°       |
|                                     | Ambient Dim A14 | 15               | 694                   | 46           | 6220    | 43°       | 656                   | 44           | 3189    | 44°       | 656                   | 44           | 1827    | 53°       | 643                   | 43        | 1028    | 70°       |
| Open Regress                        | Citizen C14     | 15               | 1173                  | 78           | 7776    | 42°       | 1091                  | 73           | 4167    | 52°       | 1112                  | 74           | 2422    | 66°       | 1058                  | 71        | 1357    | 74°       |
|                                     | Citizen C20     | 21               | 1564                  | 74           | 10369   | 41°       | 1455                  | 69           | 5559    | 57°       | 1482                  | 71           | 3199    | 63°       | 1411                  | 67        | 1810    | 76°       |
|                                     | Citizen C28*    | 30               | 2158                  | 72           | 14306   | 44°       | 2008                  | 67           | 7669    | 55°       | 2045                  | 68           | 4455    | 67°       | 1947                  | 65        | 2496    | 72°       |
|                                     | Ambient Dim A14 | 15               | 810                   | 54           | 5857    | 39°       | 779                   | 52           | 3270    | 56°       | 779                   | 52           | 1829    | 60°       | 764                   | 51        | 1058    | 72°       |
| Flat (Pin Hole)                     | Citizen C14     | 15               | 829                   | 55           | 7740    | 37°       | 737                   | 49           | 1436    | 46°       | 719                   | 48           | 2379    | 51°       | 661                   | 44        | 1357    | 64°       |
|                                     | Citizen C20     | 21               | 1105                  | 53           | 10321   | 35°       | 982                   | 47           | 5513    | 42°       | 958                   | 46           | 3169    | 49°       | 881                   | 42        | 1808    | 62°       |
|                                     | Citizen CZ8*    | 30               | 1525                  | 51           | 14258   | 32°       | 1355                  | 45           | 7604    | 44°       | 1322                  | 44           | 4375    | 53°       | 1216                  | 41        | 2496    | 59°       |
|                                     | Ambient Dim A14 | 15               | 539                   | 36           | 4828    | 36°       | 479                   | 32           | 2326    | 42°       | 467                   | 31           | 1301    | 50°       | 429                   | 29        | 689     | 63°       |
| CCT Multiplier                      |                 |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| CCT                                 | Citizen         |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| 2700                                | 0.95            |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| 3000                                | 1.00            |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| 3500                                | 1.02            |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| 4000                                | 1.03            |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |
| All measurements based on 3000 CCT. |                 |                  |                       |              |         |           |                       |              |         |           |                       |              |         |           |                       |           |         |           |



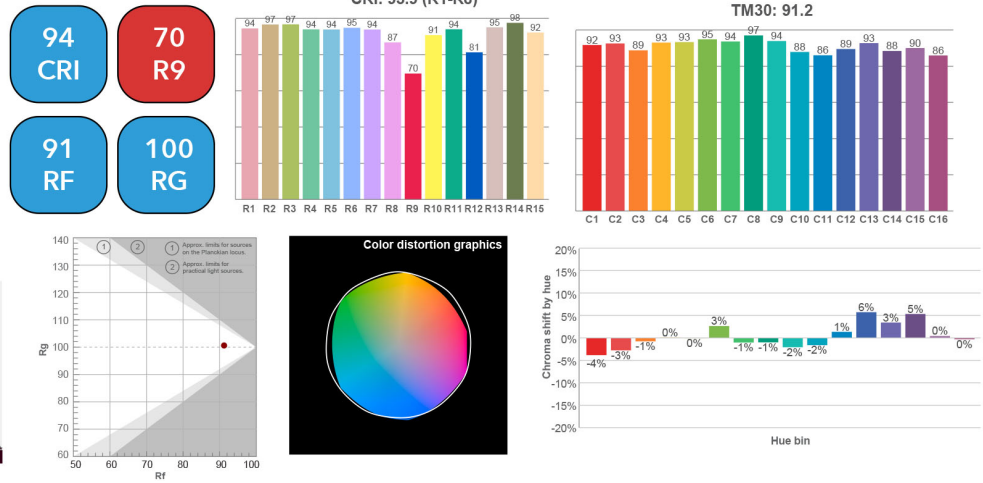
All measurements are delivered or derived delivered lumens based at 3000k. Values are based on a single downlight. Multiple downlights will deliver more light. For calculations, place 2 downlights 8" on center for each fixture location.

## Color Data

All data is based from goniometer measurements of production representative product. All values can vary +/- 10% from LED manufacturer rated data range. Measurements at 3000 CCT

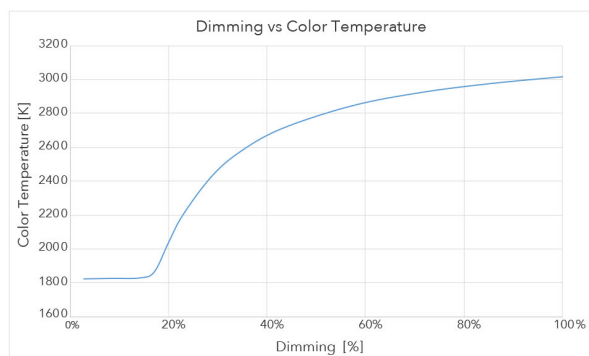
### Citizen Source C14, C20 and C28

- <2 MacAdam Ellipse (<2 SDCM)
- 90+ CRI and RF
- 60+R9, Hue Bin 1

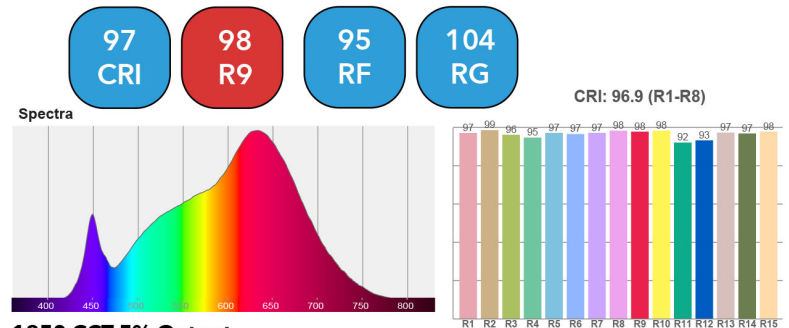


### Ambient Dim 3000k to 1900k

- <3 MacAdam Ellipse (<3 SDCM)
- 95+ CRI and RF
- 90+R9, Hue Bin 1
- Follows Black Body Locus through dimming range



#### 3000 CCT Full Output



#### 1850 CCT 5% Output

