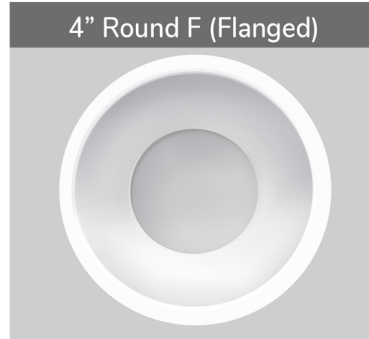
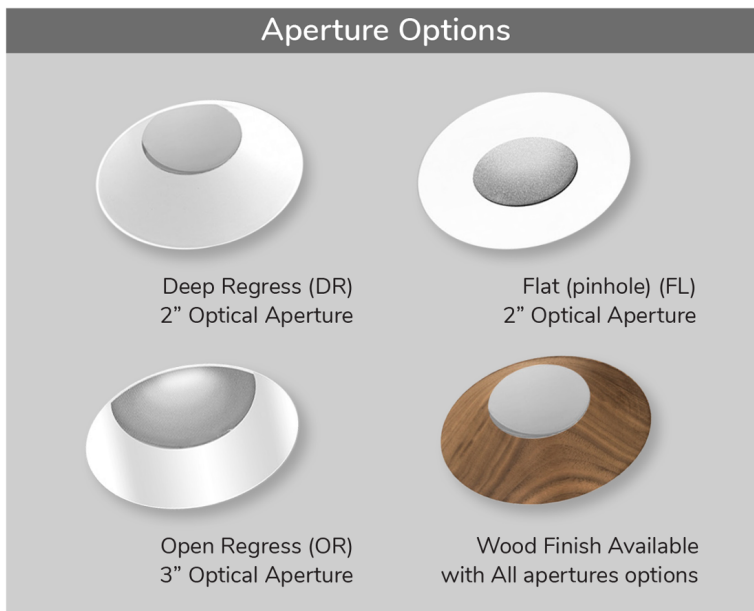
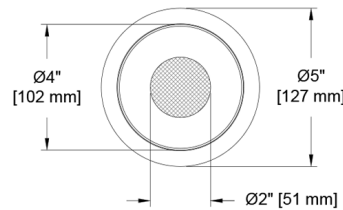
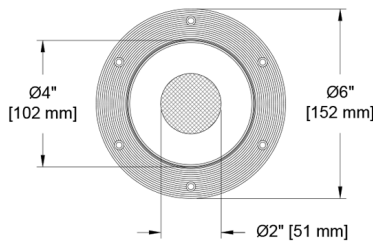


## The Core Family

Welcome to the Core line of fixtures. You will find a rich diversity of technical and aesthetic options including 3 trim apertures, 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. We are here to make your project right.



Deep Regress shown



PROJECT:

TYPE:

SPECIFIER:

DATE:

### Key Points (CR4D-RF)

#### Trim

- Flanged or Flangeless
- Flangeless includes plaster flange with 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
- <2 MacAdam Steps (<2SDCM) for fixed white
- Up to 2300 delivered lumens
- 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™, 0-10, DALI-2, DMX, Ecosystem or Wireless Control
- Flicker free to IEEE 1789-2015 available with EldoLED and TruPhase™ selections
- Prewired and integral to housing
- Universal 120-277v available

Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: CR4D-RF-DR-Z-AU-C20-35-24-E2-P16-92A-91L-97L-CP

FIXTURE	APERTURE	TRIM	MOUNTING	SOURCE / WATTS	CCT	BEAM	DRIVER / CONTROL	TRIM FINISH	LENS ACCESSORIES	ACCESSORIES
CR4D-RF										
Core 4" Round Fixed Downlight	DR Deep Regress  OR Open Regress  FL Flat (Pin Hole)	Flanged Trims  F Flanged Trim  FS Flanged Shower Trim*  <i>(for mounting choose from Flanged Housings)</i>  Flangeless Trims  Z Flangeless Trim  ZS Flangeless Shower Trim*  <i>(for mounting choose from Flangeless Housings)</i>  * Aperture Lens Required	Flanged Housings  U Universal - Non-IC Housing  AU Universal IC/Airtight*  Flangeless Housings  P Plaster - Non-IC Housing  AP Plaster IC/Airtight*  PM Panel Mount  APM Panel Mount Airtight/IC*  ● Supports CA Title 24 Compliance to JA8  * Cannot be used with C28 Source	Citizen  C14 15W 1074Lm 90+CRI, 60+R9  C20 21W 1422Lm 90+CRI, 60+R9  C28 30W† 2006Lm 90+CRI, 60+R9  C32 35W 2751Lm* 90+CRI, 60+R9  Tunable  T9 10W 90+CRI, 70+R9 Tunable White  T15 15W 90+CRI, 60+R9 Tunable White  T20 21W 90+CRI, 60+R9 Tunable White  RGBW 90+CRI, 60+R9  Ambient Dim™  A14 15W 858Lm 95+CRI, 90+R9  A20 21W 858Lm 95+CRI, 90+R9  ● California Title 24 Compliant to JA8 * Requires Active Cooling and not compatible with IC/Airtight housing. Not compatible with L2 and LP drivers. †Does not meet CA Title 24 with Flat Aperture selection	24 2400K  27 2700K  35 3500K  40 4000K  30 3000K  Tunable  TW1840 1800-4000K Tunable White w/ E1, E2, E3, E4  TW2765 2700-6500K Tunable White w/ E1, E2, E3, E4  RG1280 1200-8000K RGBW Dynamic Color Changing *Requires E2 or E4  Ambient Dim™  2722 2700-2200K *A14 Only  3019 3000-1900K  3022 3000-2200K *A14 Only	15 Spot  24 Narrow Flood  40 Flood  55 Wide Flood	C1 0-10 1.0%, UNV (120-277V) linear  C2 ELV/Triac 1.0%, (120-277V) linear  E1 0-10 0.1%, UNV (120-277V) log  E2 DALI-2 0.1%, UNV (120-277V) log  E3 0-10 0.1%, UNV (120-277V) linear  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  LD Digital Ecosystem 1.0%, UNV (120-277V) ECO Hi-Lume SoftOn/Fade-to-Black LDE1  TR2 TruPhase™ 0.1%, (120-120V) log Up to 20W Forward and Reverse compatible Phase Dimming Static White & Ambient Dim only  * Not compatible with C28	W White Paint  B Black Paint  D Wood*  PXX Specialty Paint Color*  P01-P15  C Custom/RAL Color**  * Wood "D" selection to be used with Z trim and PM mounting ** See Specialty Finish Guide	Aperture Lens  91A Solite  92A Supertex (Spreader Lens)  93A Frosted  XXA Other Aperture Lens Treatments*  Reflector (lamp) Media  91L Solite  92L Supertex (spreader lens)  97L Black Hexcel Louver  XXL Other reflector (lamp) media*  1 piece of media per opening (aperture or reflector) can be selected. *See Lens Accessory Guide	CP Chicago Plenum  EM Emergency Pack  Controls  LR Lutron Wireless RF PowPak  ATH Lutron Athena Wireless Node Must be used with E2 driver  CA Casambi Wireless BLE to be paired with driver

# Ceiling Cutouts and Dimensions

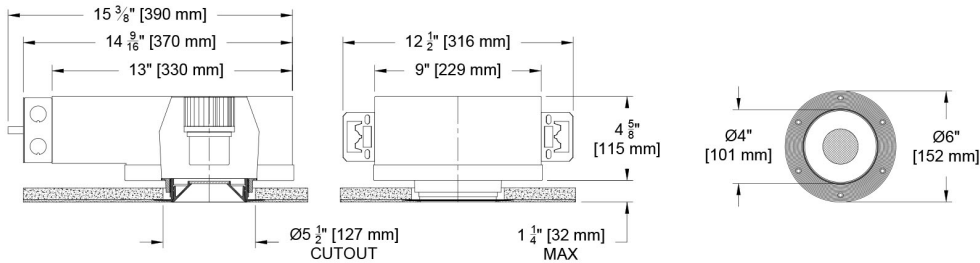
Deep Regress Shown - others similar

C28 source selection requires larger non-IC housing to accommodate active cooling.

## Round Flangeless Housing

## Plaster Trim (P/AP)

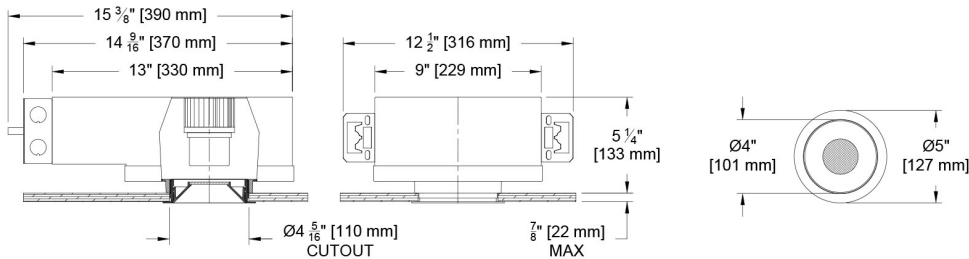
(CR4D-RF-DR-Z-P/AP)



## Round Flanged Housing

## Flanged Mount (U/AU)

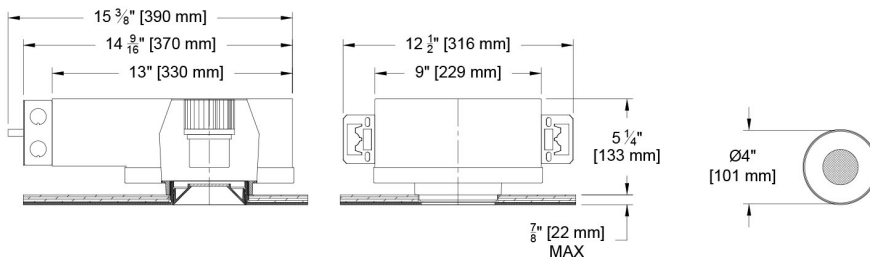
(CR4D-RF-DR-F-U/AU)



## Round Flangeless Housing

## Panel Mount (PM/APM)

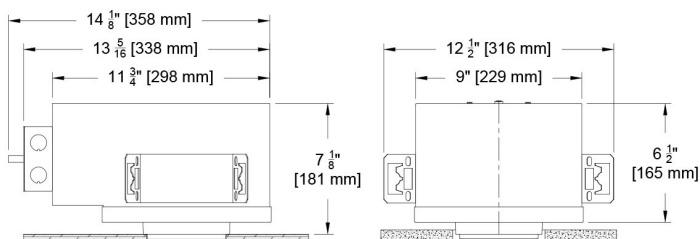
(CR4D-RF-PM/APM-Z)



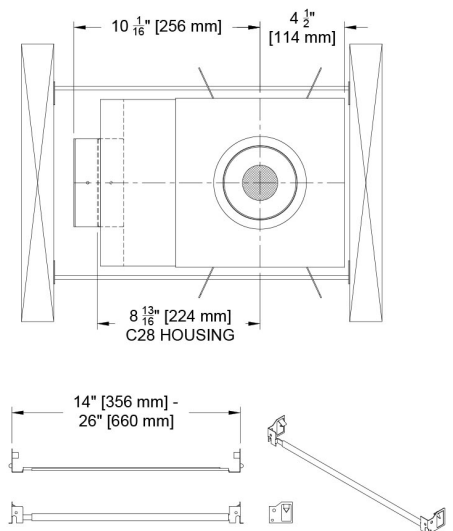
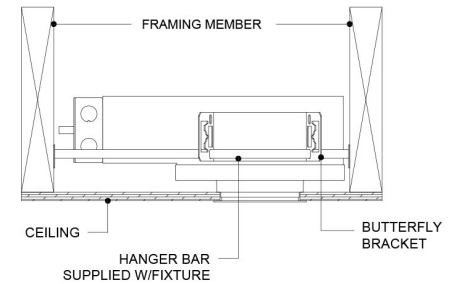
## Round Housing for

(U) (PM) C28 Only\*

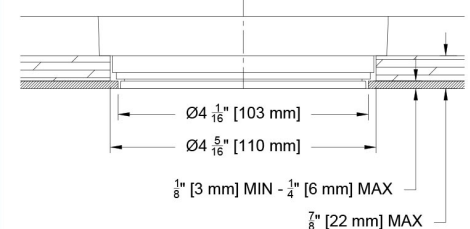
(CR4D-RF-DR-F/Z-P/U/PM-C28)



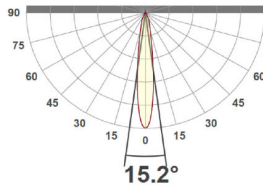
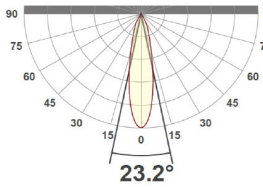
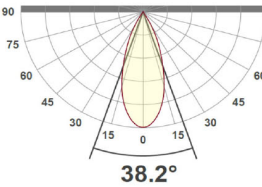
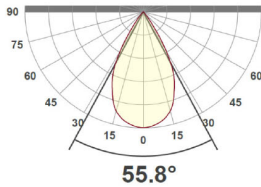
## Hanger Bar Detail



## Panel Mount Detail



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

ROUND 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	Del. Lumens (lm)	Lms/ Watt	Peak CD	10% Field
Deep Regress	Citizen C14	15	1149	77	7832	42°	1074	72	4247	46°	1117	74	2867	51°	1098	73	1416	71°
	Citizen C20	21	1531	73	11189	43°	1422	68	6491	52°	1490	71	4096	56°	1464	70	2208	72°
	Citizen C28*	30	2046	68	16106	41°	2006	67	9871	47°	2069	69	5688	54°	2020	67	3155	69°
	Ambient Dim A14	15	882	59	7188	38°	858	57	4167	44°	801	53	2027	57°	844	56	1286	70°
Open Regress	Citizen C14	15	1267	84	7877	42°	1179	79	4203	52°	1183	79	2421	66°	1199	80	1533	75°
	Citizen C20	21	1689	80	12229	41°	1571	75	6562	57°	1578	75	3459	63°	1536	73	1965	76°
	Citizen C28*	30	2331	78	16883	44°	2169	72	9060	55°	2177	73	5140	67°	2163	72	2939	75°
	Ambient Dim A14	15	1001	67	7323	39°	987	66	4067	53°	991	66	2235	60°	969	65	1281	72°
Flat (Pin Hole)	Citizen C14	15	824	55	7851	37°	716	48	4844	46°	700	47	2801	51°	623	42	1370	64°
	Citizen C20	21	1099	52	11216	35°	967	46	6544	42°	933	44	3732	49°	830	40	1957	62°
	Citizen CZ8*	30	1517	51	16982	32°	1334	44	8389	44°	1288	43	5154	53°	1145	38	2962	59°
	Ambient Dim A14	15	747	50	7305	36°	702	47	4077	42°	678	45	2247	50°	622	41	1076	63°
CCT Multiplier																		
CCT	Citizen																	
2700	0.95																	
3000	1.00																	
3500	1.02																	
4000	1.03																	
All measurements based on 3000 CCT. Ambient Dim based on full output.																		

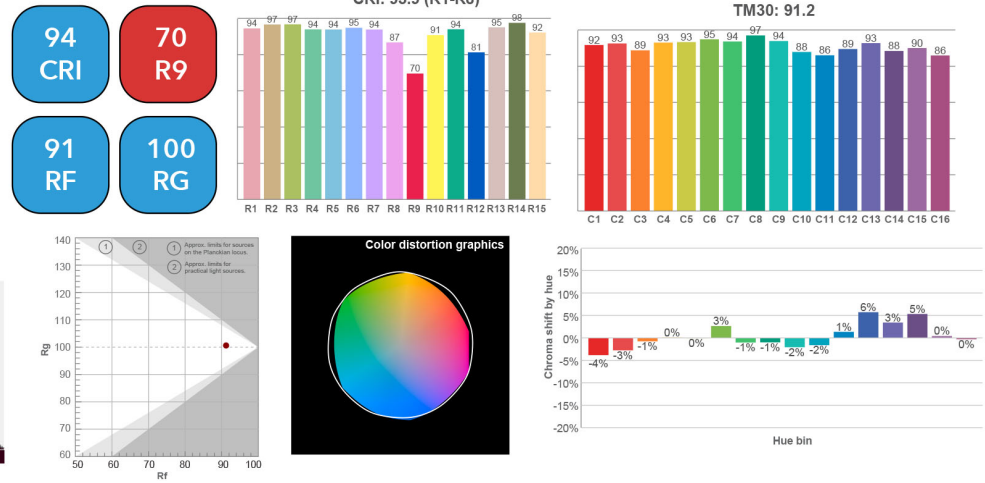
ISO CD Plot based on open Regress. All data based on delivered or derived delivered lumens at 3000k. Ambient dim at full output.  
\*C28 source requires active cooling. Flat (Pin Hole) aperture wider beams experience significant beam clipping - refer to PDF report for exact FWHM beam angle.

## Color Data

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

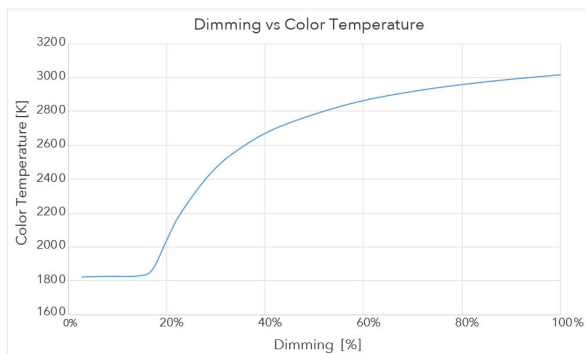
### Citizen Source for C14, C20 and C28

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

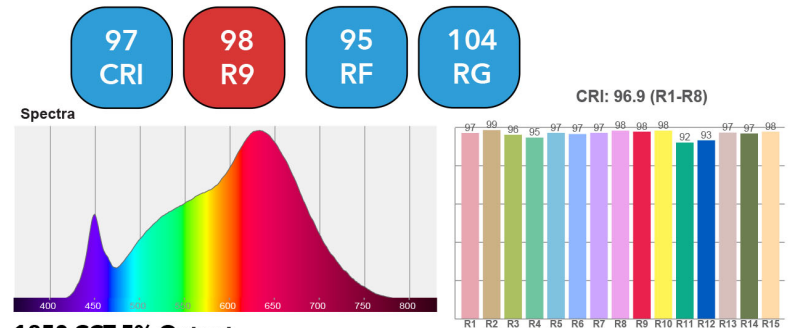


### Ambient Dim - 3000k to 1900k

- <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

