

The Core Family

Welcome to the Core line of fixtures. The family is filled with a rich diversity of options while keeping classic forms. This family member features two adjustable heads deployed within a single square optical aperture of your choosing. The unique configuration allows down and accent lighting with 360° rotation and 45° tilt within a single ceiling element. With multiple source, driver, control, mounting and finish options, including wood trim, you should find the option you are looking for. If not, let us know the modification you need, we usually say YES.

PROJECT:

TYPE:

SPECIFIER:

DATE:

Key Points (CR4MD-SDH)

Trim

- Flanged or Flangeless
- One-piece die cast aluminum or machined wood trim
- 14 color options + custom RAL or wood available
- Flangeless plaster mounting includes plaster flange with lip

Source / Optics

- 2400K, 2700K, 3000K, 3500K, 4000K, Ambient Dim, RGBW & Tunable White options
- 90 CRI, 60+ R9 Standard- 95 CRI 90+R9 available with Ambient Dim
- <2 MacAdam Steps (<2SDCM) for fixed white
- Up to 1068 delivered lumens from a single head
- Adjustable to 45° with 358° of rotation for both heads

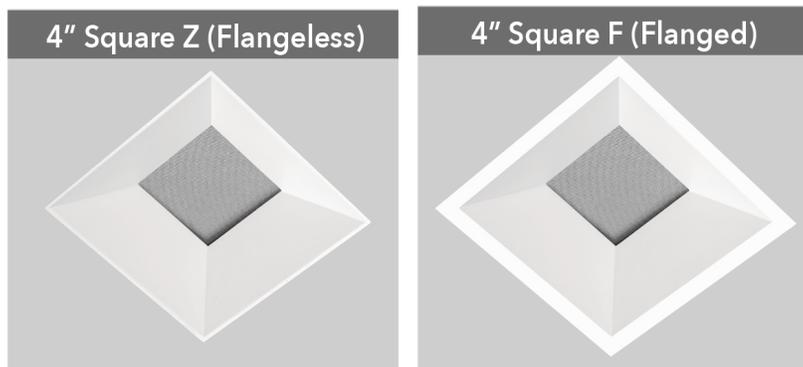
Housing

- 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

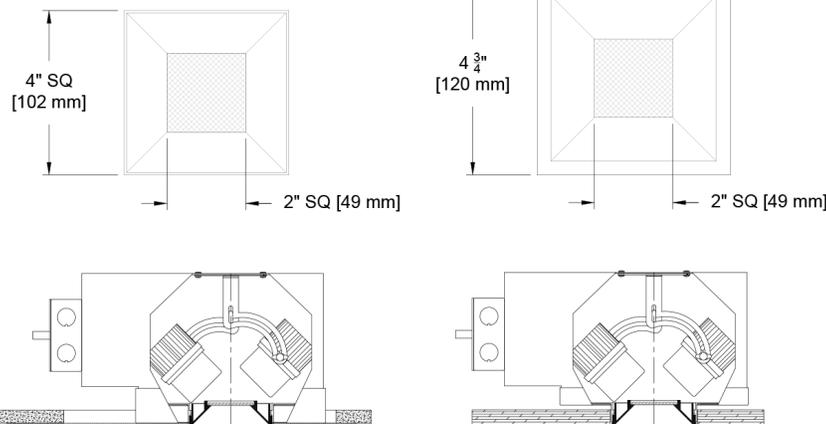
- Heavy gauge aluminum for new construction or remodel

Driver

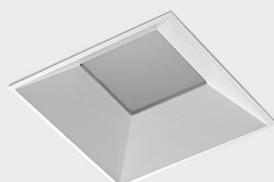
- TruPhase™, 0-10, DALI-2, DMX, Ecosystem or Wireless Control
- Flicker free to IEEE 1798-2015 available with EldoLED and TruPhase™ selections
- Prewired and integral to housing
- Universal 120-277v unless otherwise noted



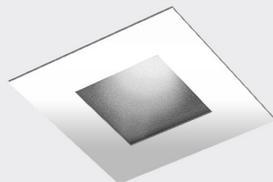
Deep Regress Shown



Aperture Options



Deep Regress (DR)
2" Optical Aperture
Formerly known as 1009M-2



FL- Flat (Pin Hole)
2" Optical Aperture
Formerly known as 1012M-2



Open Regress (OR)
3" Optical Aperture
Formerly known as 1017M-2



Wood Finish
All apertures options

Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: CR4MD-SDH-DR-Z-AU-A14-2722-24-E2-2C-P16-92A-91L-97L-CP

FIXTURE	APERTURE	TRIM	MOUNTING	SOURCE / WATTS	CCT	BEAM	DRIVER / CONTROL	CIRCUITS	TRIM FINISH	LENS ACCESSORIES	ACCESSORIES
CR4MD-SDH											
Core 4" Square Dual Head Adjustable Downlight	DR Dual Head Deep Regress OR Dual Head Open Regress FL Dual Head Flat (Pin Hole)	Flanged Trims F Flanged Trim FS Flanged Shower Trim* (for mounting choose from Flanged Housings) Flangeless Trims Z Flangeless Trim ZS Flangeless Shower Trim* (for mounting choose from Flangeless Housings) * Aperture Lens Required	Flanged Housings U Universal - Non IC Housing AU Airtight Universal IC-Rated Flangeless Housings P Plaster AP Airtight Plaster IC-Rated PM Panel Mount APM Airtight Panel Mount IC-Rated California Title Compliant Note: Selection of EldoLED or Lutron driver requires a larger housing - see drawings	Citizen C14 15W 995Lm** 90+CRI, 60+R9 Tunable T9 90+CRI, 60+R9 Tunable White T15 90+CRI, 60+R9 Tunable White RGBW 90+CRI, 60+R9 Ambient Dim™ A14 15W 656Lm** 95+CRI, 90+R9 California Title 24 Compliant to JA8 ** Based on Single Head Deep Regress 24" beam ^ Available upon request. Contact your regional sales manager	24 2400K 30 3000K 35 3500K 27 2700k 40 4000K 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 3019 3000-1900K 3022 3000-2200K	15 Spot 24 Narrow Flood 40 Flood 55 Wide Flood	C1 0-10 1.0%, UNV (120-277V) linear C2 ELV/Triac 1.0%, (120V) 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 *Requires larger housing - see drawings	1C 1 Circuit 2C 2 Circuit	W White Paint B Black Paint D Wood* PXX Specialty Paint Color* P01-P15 C Custom/RAL Color** *Refer to wood trim guide **See Specialty Finish Guide FINISH GUIDE LINK WOOD TRIM GUIDE	Aperture Lens 91A Solite 93A Frosted XXA Other Aperture Lens Treatments* Reflector (lamp) Media 91L Solite 93L Frosted 97L Black Hexcel Louver XXL Other reflector (lamp) media* 1 piece of media per opening (aperture or reflector) can be selected * Refer to Lens Accessory Guide LENS ACCESSORY VISUAL GUIDE LINK	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

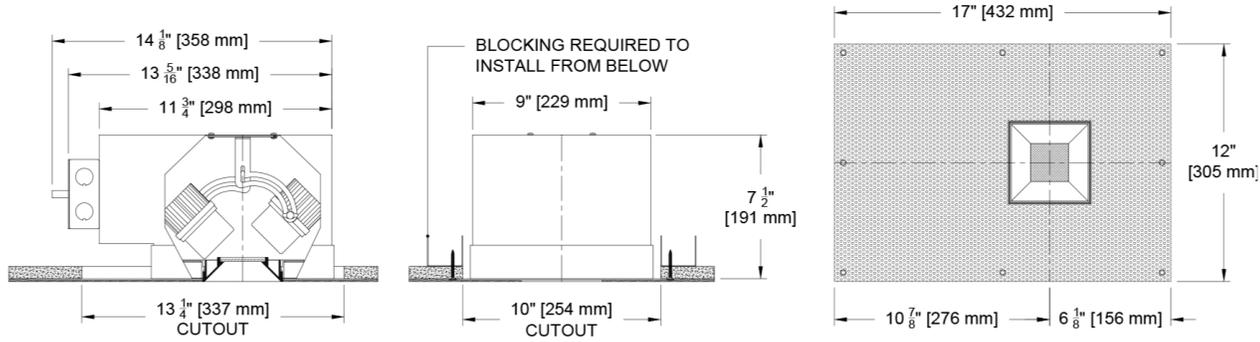
A Lutron or Eldoed driver selection requires a larger housing to accommodate packaging, wiring and service of "K-can" size driver. See next page for other mounting options and drawings

Square Flangeless Housing

Plaster Mount (P/AP)

C1 or C2 Driver

(CR4MD-SDH-DR-Z-P/AP)

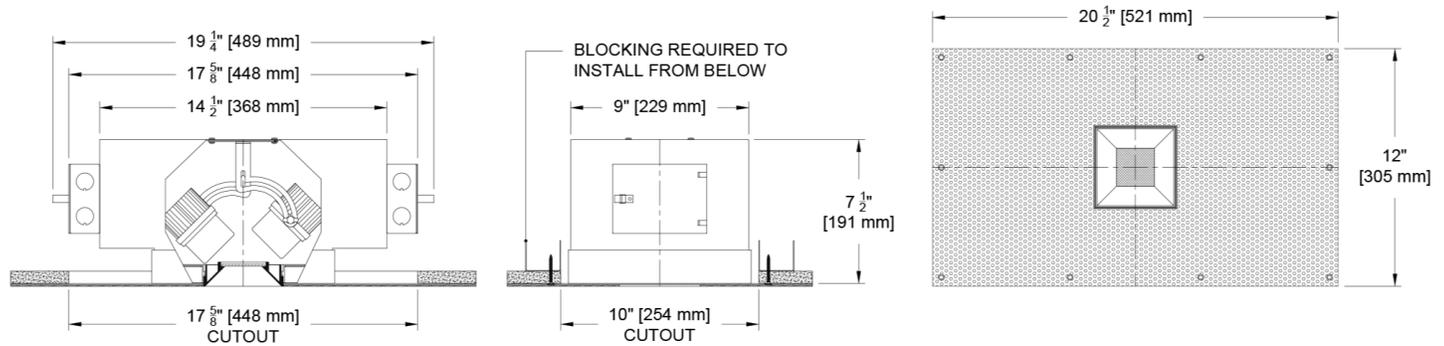


Square Flangeless Housing

Plaster Mount (P/AP)

Lutron or Eldo Driver

(CR4MD-SDH-DR-Z-P/AP)



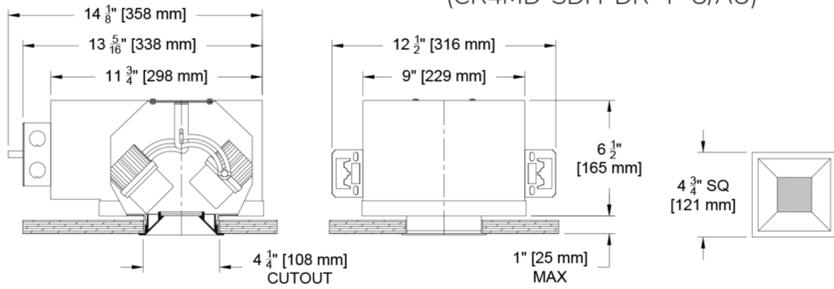
Ceiling Cutouts and Dimensions

Deep Regress Shown - others similar

Square Flanged Housing

Flanged Mount (U/AU)

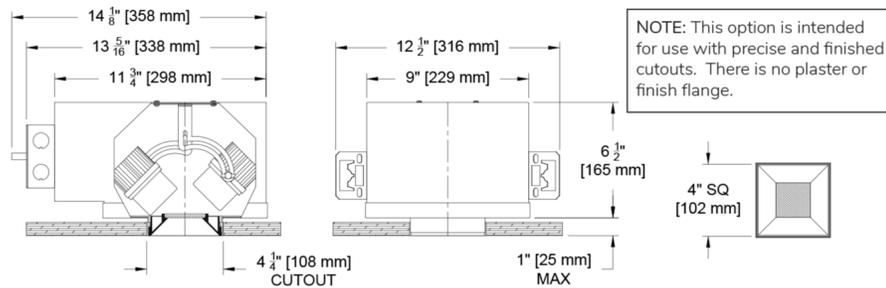
(CR4MD-SDH-DR -F-U/AU)



Square Flangeless Housing

Flangeless Mount (U/AU)

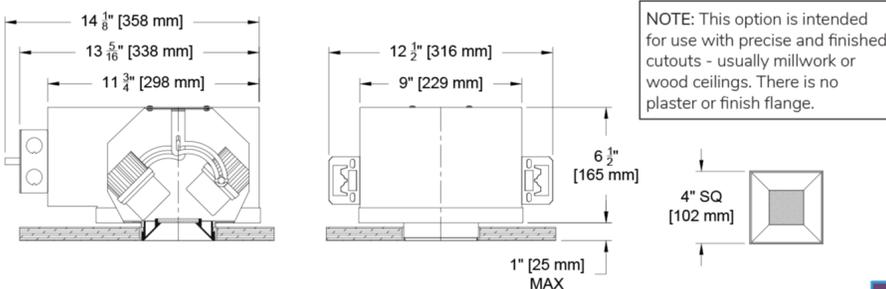
(CR4MD-SDH-DR -Z-U/AU)



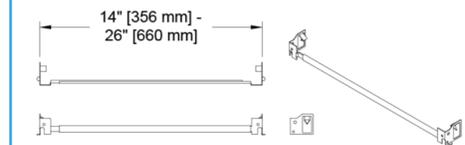
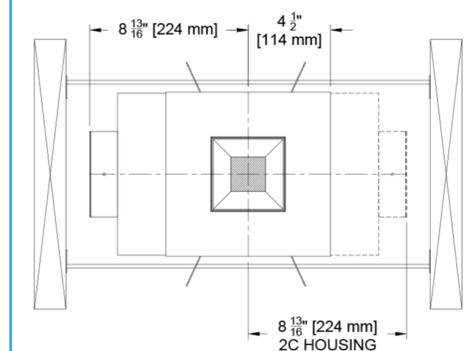
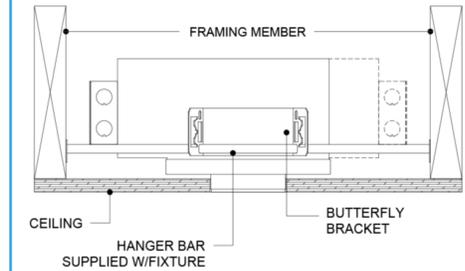
Square Flangeless Housing

Panel Mount (PM/APM)

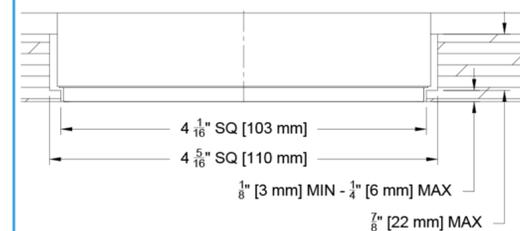
(CR4MD-SDH-DR -Z-PM/APM)



Hanger Bar Detail

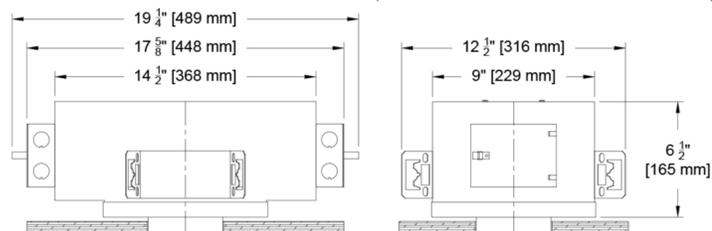


Panel Mount Detail



Housing Detail- EldoLED / Lutron Driver Selection

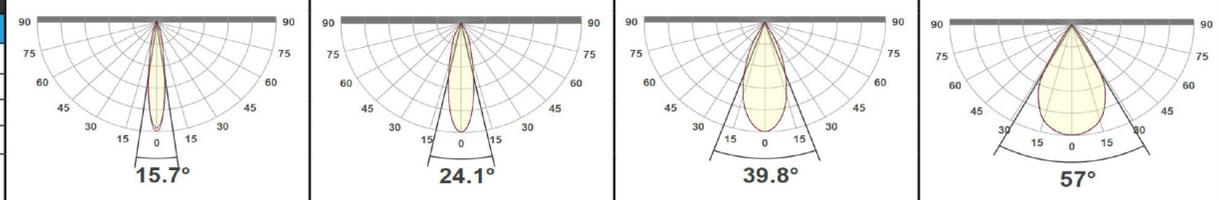
(CR4MD-SDH-_-_-C14-30-24)



Photometric Table

Photometric values are based on a single head fixture. Multiple heads will deliver additional light and will need to be accounted for individually in calculations. All data is based from goniometer measurements of production representative product. All lumen values are delivered or derived and can vary +/- 10% from LED manufacturer rated flux range. Measurements at 3000 CCT and Ambient Dim at full output. Due to thermal and space considerations, our maximum power is 15 system watts. If higher lumen packages are desired in this configuration, contact your Regional Sales Manager for a custom request.

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°
	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°
	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°
	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 delivered or derived delivered lumens based on 3000K. ISO CD plots based on Open Regress. Data is based on a single head. Dual heads will deliver more light depending on aim. Ambient dim at full output. Flat (Pin Hole) at wider beam angles 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 data range. Measurements at 3000 CCT unless otherwise noted

Citizen Source C14, C20 and C28

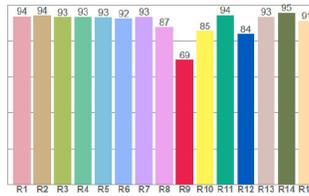
Citizen CoB

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

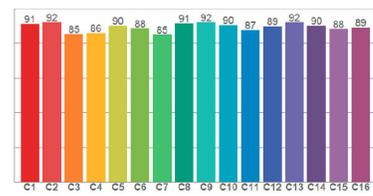
92 CRI 69 R9

89 RF 103 RG

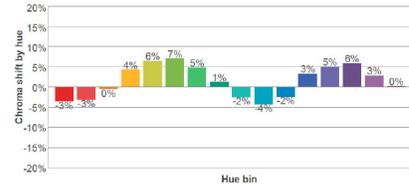
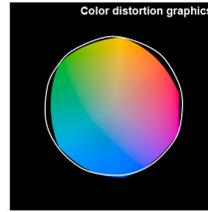
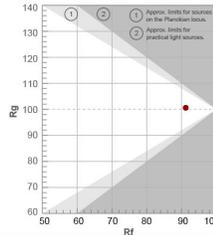
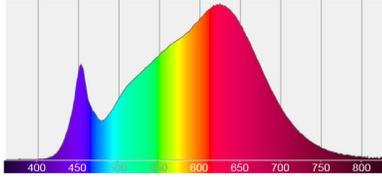
CRI: 92.4 (R1-R8)



TM30: 89.2



Spectra



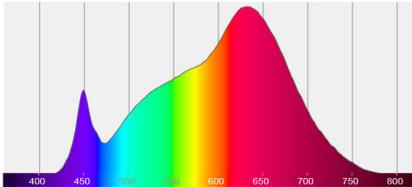
Ambient Dim - 3000k to 1900k

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

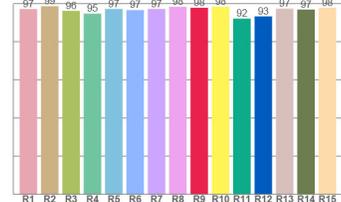
3000 CCT Full Output

97 CRI 98 R9 95 RF 104 RG

Spectra



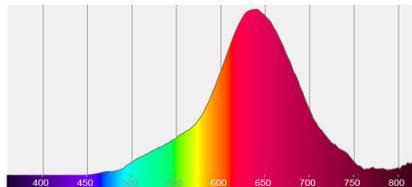
CRI: 96.9 (R1-R8)



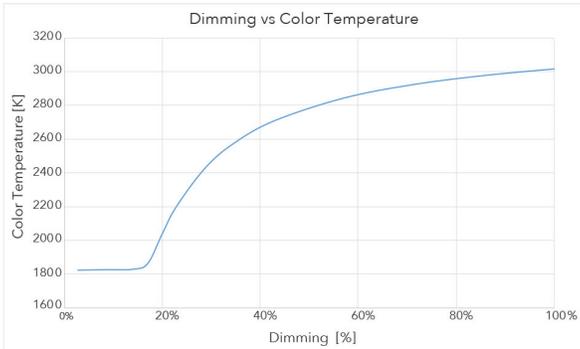
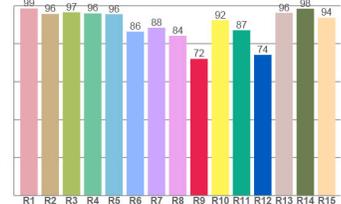
1850 CCT 5% Output

93 CRI 72 R9 83 RF 110 RG

Spectra



CRI: 92.6 (R1-R8)



Tunable White and RGBW

Color and flux information available upon request