

# Core 4" Rectangular Multiple Adjustable Downlight - 2 & 3 Head

Formerly known as 1009-2, 1009-3, 1017-2, 1017-3

Recessed Adjustable Single Aperture

## The Core Family

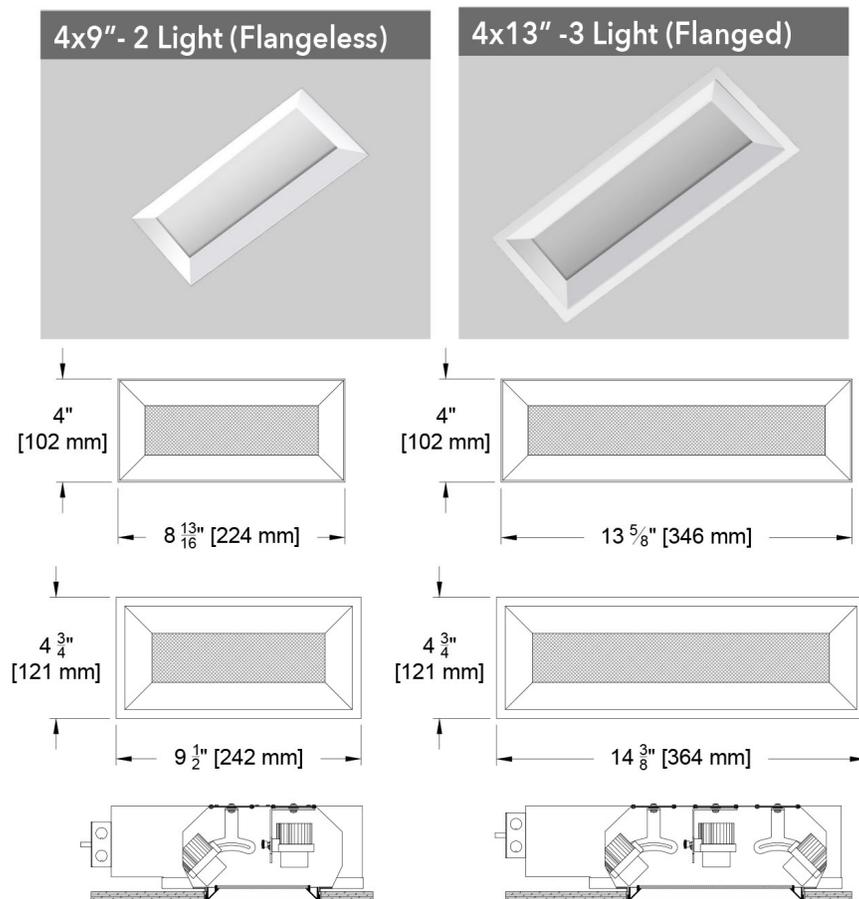
Welcome to the Core line of fixtures. The family is filled with a rich diversity of options while keeping classic forms. This highly modifiable family lineage features multiple heads in a single aperture with a wide selection of options including wood trims and up to 6000 lumens in a 3 head selection.

PROJECT:

TYPE:

SPECIFIER:

DATE:



### Key Points (CR4MD-TMHA)

#### Trim

- Flange of Flangeless
- Flangeless includes mud-in flange with plaster lip
- 14 color options + custom RAL or wood available
- One-piece die cast aluminum or machined wood trim

#### Source / Optics

- Lifetime: L87B3>55,000 hours at 40°C Ambient
- 2700, 3000, 3500, 4000K, Ambient Dim standard. Tunable White and RGBW upon request
- 90 CRI , 60+ R9 Standard- 95 CRI 90+R9 Optional
- <2 MacAdam Steps (<2SDCM) for fixed white
- Over 6000 lumens delivered in 3 head open regress fixture with a C28 source selection
- Adjustable to 45° with 358° of rotation
- 4 beamspreads available- 15°, 24°, 40°, and 55°

#### Housing

- **TITLE 24** Compliant to **JA8** with Airtight Housing
- **UL** 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™ Dimming to 0.1% available
- Prewired and integral to housing
- Flicker free to IEEE 1789-2015 available with EldoLED and TruPhase™ selections
- TruPhase™, 0-10, DALI-2, Ecosystem or Wireless Control
- Universal 120-277v

### Aperture Options



Deep Regress (DR)  
2 Heads

Formerly known as 1009-2

Deep Regress (DR)  
3 Heads

Formerly known as 1009-3

Open Regress (OR)  
2 Heads

Formerly known as 1017-2

Open Regress (OR)  
3 Heads

Formerly known as 1017-3

Wood Finish (DR)

3 Heads shown (2 Heads Available)  
Formerly known as 1009-3

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
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°

For Open Regress and all notes please see full photometrics. All data based on single light single aperture fixture (CR4D-SA) Multiply by number of heads for total flux. \*C28 source requires active cooling and must be used with NIC (U) housing.

# Core 4" Rectangular Multiple Adjustable Downlight - 2 & 3 Head

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Recessed Adjustable Single Aperture



## Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: CR4MD-TMHA-DR3-F-AU-C20-35-24-E2-3C-P14-97L-CP

FIXTURE	APERTURE	TRIM	MOUNTING	SOURCE / WATTS	CCT	BEAM	DRIVER / CONTROL	CIRCUITS	TRIM FINISH	LENS ACCESSORIES	ACCESSORIES
<b>CR4MD-TMHA</b>											
Core 4" Rectangular Multiple Adjustable Downlight - 2 and 3 Head	<b>Two Head</b>	F Flanged Trim	U Universal - Non IC	<b>Citizen</b>	27 2700K	15 Spot	C1 0-10 1.0%, UNV (120-277V) linear	1C 1 Circuit	W White Paint	<b>Aperture Lens</b>	EM Emergency Pack
	DR2 2 Head - Deep Regress	Z Flangeless Trim	AU Universal IC/Airtight	C14 15W 1173Lm** 90+CRI, 60+R9	30 3000K	24 Narrow Flood	E1 0-10 0.1%, UNV (120-277V) log	2C 2 Circuit	B Black Paint	91A Solite	CP Chicago Plenum
	OR2 2 Head - Open Regress	FS Flanged Shower Trim*	P Plaster - Non IC	C20 21W 1564Lm** 90+CRI, 60+R9	35 3500K	40 Flood	E2 DALI-2 0.1%, UNV (120-277V) log		D Wood*	92A Supertex (Spreader Lens)	<b>Controls</b>
	<b>Three Head</b>	ZS Flangeless Shower Trim*	AP Plaster IC/Airtight	C28 30W* 2158Lm** 90+CRI, 60+R9	40 4000K	55 Wide Flood	E3 0-10 0.1%, UNV (120-277V) linear		PXX Specialty Paint Color*	93A Frosted	LR Lutron Wireless RF PowPak
	DR3 3 Head - Deep Regress	* Aperture Lens Required	PM Panel Mount - Non IC	<b>Ambient Dim™</b>	AD 1900-3000K		LD Digital Ecosystem 1.0%, UNV (120-277V) ECO Hi-Lume SoftOn/Fade-to-Black LDE1		P01-P15	XXA Other Aperture Lens Treatments*	ATH Lutron Athena Wireless Node <i>Must be used with E2 driver</i>
	OR3 3 Head - Open Regress		APM Panel Mount Airtight/IC	<b>Ink™</b>			TR2 TruPhase™ 0.1%, (120-120V) log Up to 20W Forward and Reverse compatible Phase Dimming Static White & Ambient Dim only		C Custom/RAL Color**	<b>Reflector (lamp) Media</b>	CA Casambi Wireless BLE to be paired with driver
	Note: Photometrics for single head only		California Title 24 Compliant	Tunable White 90+CRI, 70+R9 1800-4000K or 2700-6500K^			C2 ELV/Triac 1.0%, (120V) linear * Not compatible with C28			91L Solite	
				RGBW 90+CRI, 60+R9 ^						97L Black Hexcel Louver	
				California Title 24 Compliant to JA8						XXL Other reflector (lamp) media*	
				* Requires Active Cooling and not compatible with IC/Airtight housing. Not compatible with L2 and LP drivers.						1 piece of media per opening (aperture or reflector) can be selected *Refer to Lens Guide	
				** Based on Open Regress 15° beam, single head							
				^ Available upon request. Contact your regional sales manager							



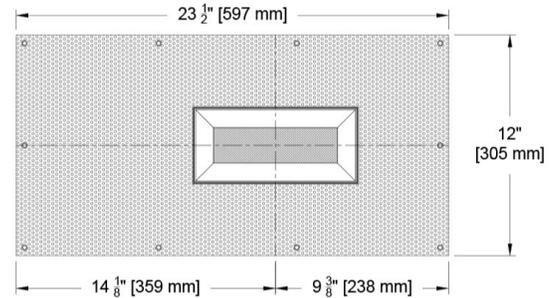
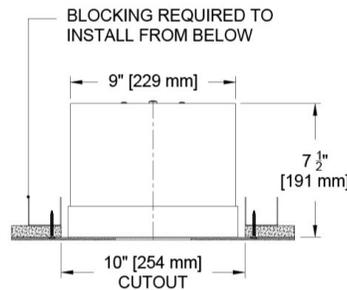
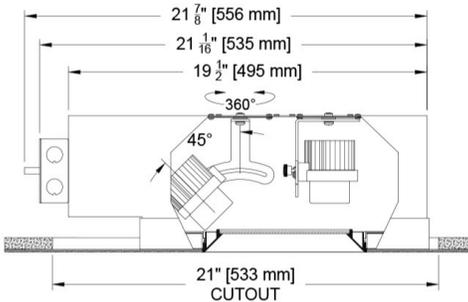
# Ceiling Cutouts and Dimensions

Deep Regress Shown - others similar

## 2 Head Flangeless Housing

### Plaster Mount (P/AP)

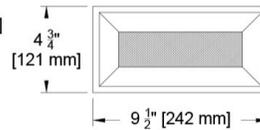
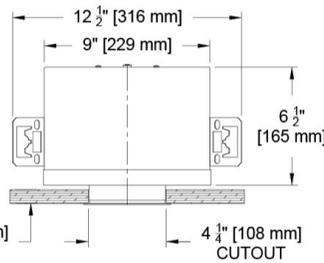
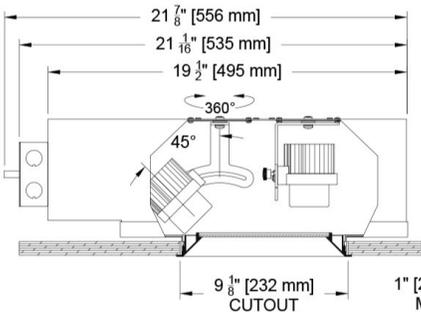
(CR4MD-TMHA-DR2-Z-P/AP)



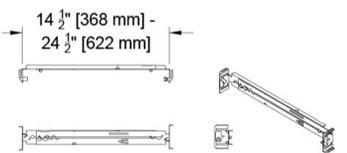
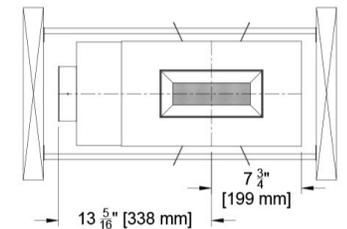
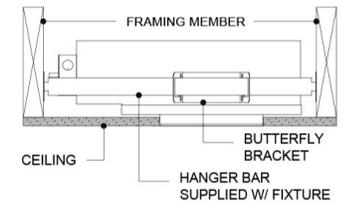
## 2 Head Flanged Housing

### Flanged Mount (U/AU)

(CR4MD-TMHA-DR2-Z-F-U/AU)



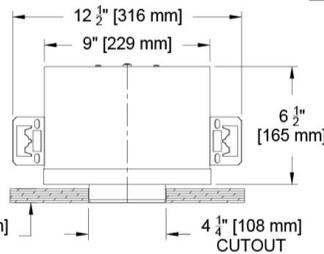
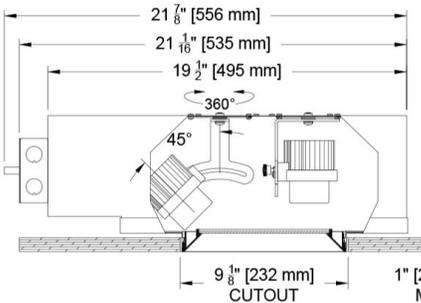
### Hanger Bar Detail



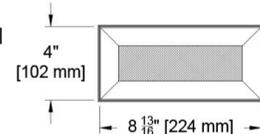
## 2 Head Flangeless Housing

### Flangeless Mount (U/AU)

(CR4MD-TMHA-DR2-Z-U/AU)



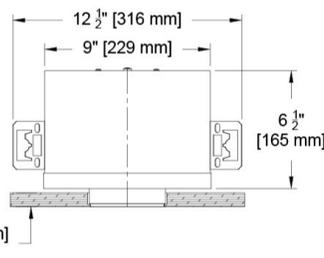
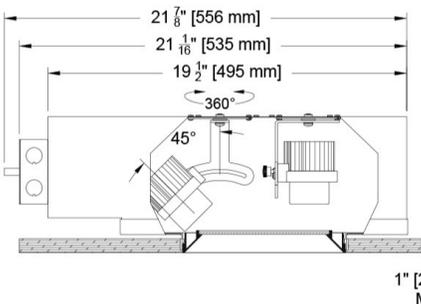
NOTE: This option is intended for use with precise and finished cutouts. There is no plaster or finish flange.



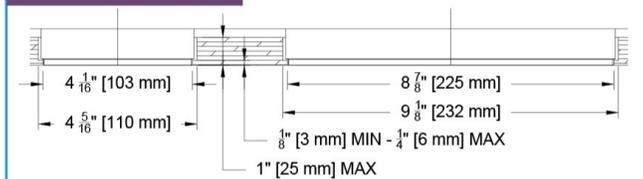
## 2 Head Flangeless Housing

### Panel Mount (PM/APM)

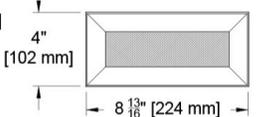
CR4MD-TMHA-DR2-Z-PM/APM)



### Panel Mount Detail



NOTE: This option is intended for use with precise and finished cutouts - usually millwork or wood ceilings. There is no plaster or finish flange.



# Core 4" Rectangular Multiple Adjustable Downlight - 2 & 3 Head

Formerly known as 1009-2, 1009-3, 1017-2, 1017-3

Recessed Adjustable Single Aperture

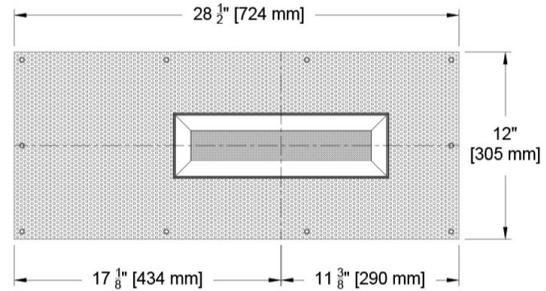
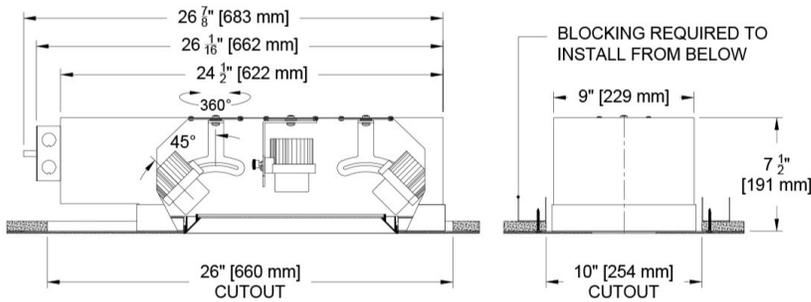
## Ceiling Cutouts and Dimensions

Deep Regress Shown - others similar

### 3 Head Flangeless Housing

#### Plaster Mount (P/AP)

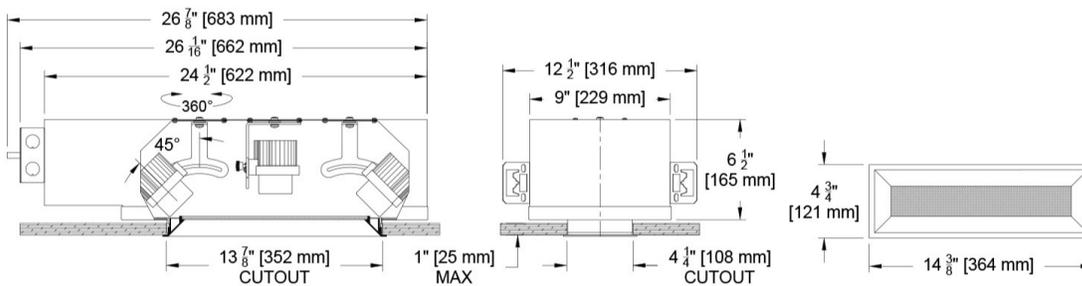
(CR4MD-TMHA-DR3-Z-P/AP)



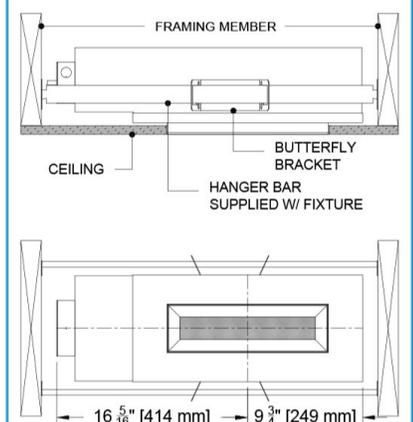
### 3 Head Flanged Housing

#### Flanged Mount (U/AU)

(CR4MD-TMHA-DR3-F-U/AU)



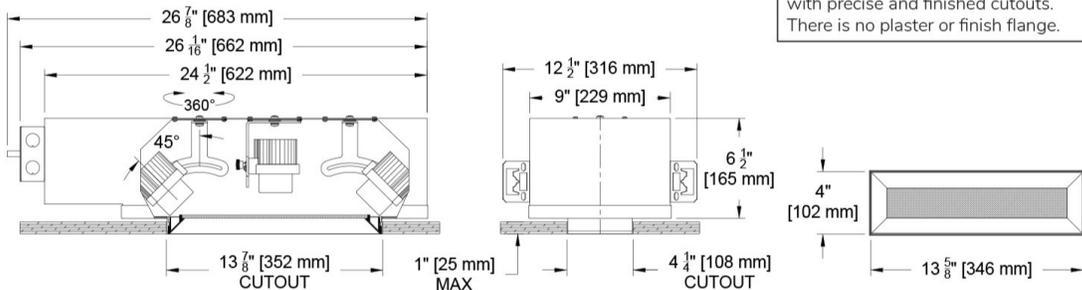
#### Hanger Bar Detail



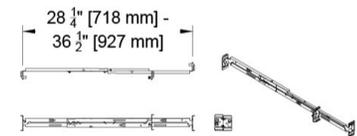
### 3 Head Flangeless Housing

#### Flangeless Mount (U/AU)

(CR4MD-TMHA-DR3-Z-U/AU)



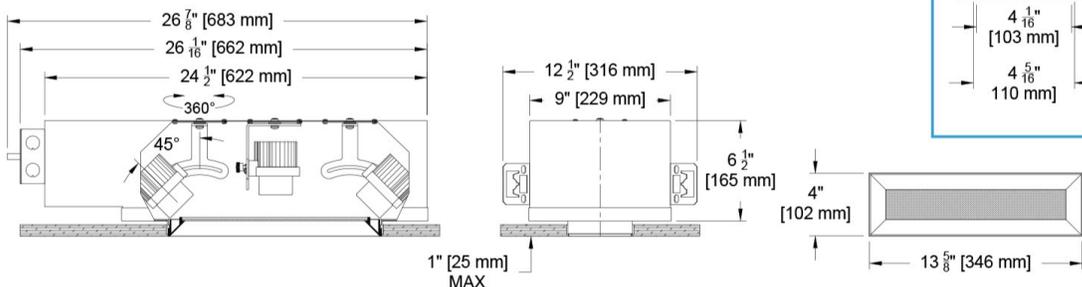
NOTE: This option is intended for use with precise and finished cutouts. There is no plaster or finish flange.



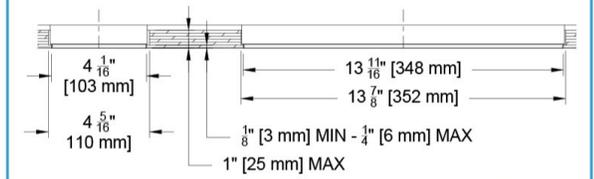
### 3 Head Flangeless Housing

#### Panel Mount (PM/APM)

(CR4MD-TMHA-DR3-Z-PM/APM)



#### Panel Mount Detail



NOTE: This option is intended for use with precise and finished cutouts - usually millwork or wood ceilings. There is no plaster or finish flange.

# Core 4" Rectangular Multiple Adjustable Downlight - 2 & 3 Head

Formerly known as 1009-2, 1009-3, 1017-2, 1017-3

Recessed Adjustable Single Aperture



## Photometric Table

All data is based on goniometer measurements of production representative product for a single head. Multiple heads will deliver additional light and will need to be accounted for individually in calculations. All lumen values can vary +/- 10% from LED manufacturer rated flux range. Measurements at 3000 CCT.

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°
CCT Multiplier																		
CCT	Citizen																	
2700	0.95																	
3000	1.00																	
3500	1.02																	
4000	1.03																	
All measurements based on 3000 CCT.																		

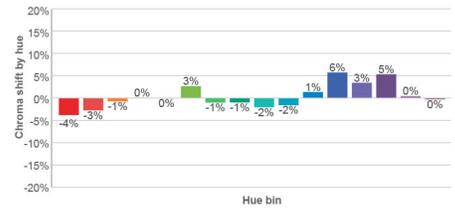
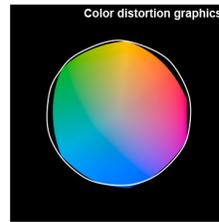
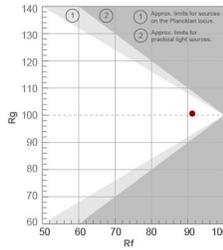
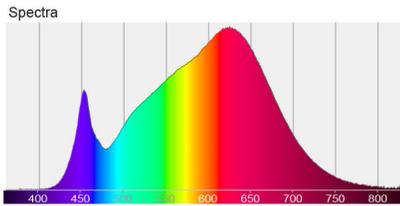
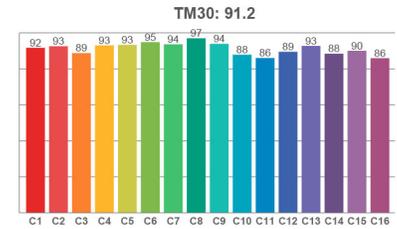
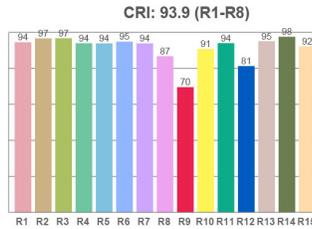
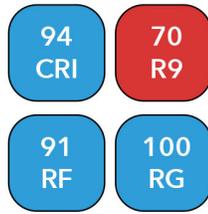
All Measurements delivered or derived delivered lumens based on a single head in the CR4D-SA at 3000K. Values are based on a single head aimed at 0° in the Core 4" square down light (CR4D-SA). Multiple heads will deliver additional light and will need to be accounted for individually in calculations. ISO CD plots based on Open Regress. Ambient dim at full output. C28 source requires active cooling and must be used with NIC housing. 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 nominal flux. Measurements at 3000 CCT

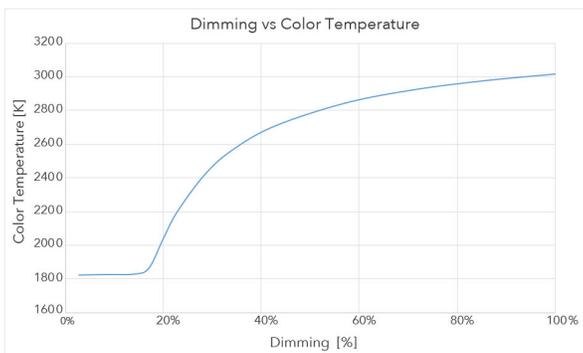
## Citizen Sources for C14, 20 and C28

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

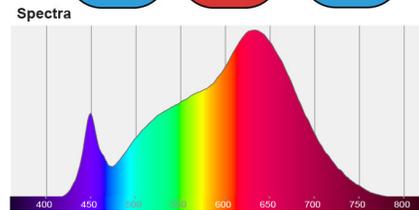
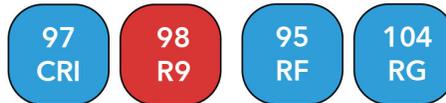


## Ambient Dim 3000k to 1900k

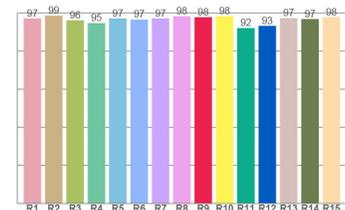
- <3 MacAdam Ellipse (<3 SDCM)
- 95+ CRI and RF
- 90+R9, Hue Bin 1
- Follows Black Body Locus through dimming range



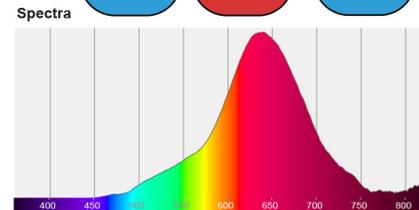
### 3000 CCT Full Output



CRI: 96.9 (R1-R8)



### 1850 CCT 5% Output



CRI: 92.6 (R1-R8)

