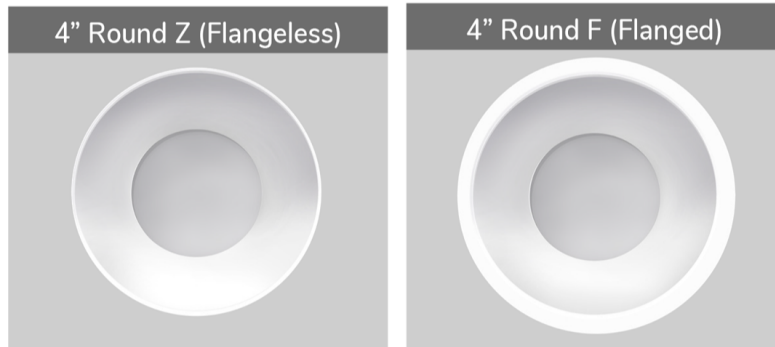
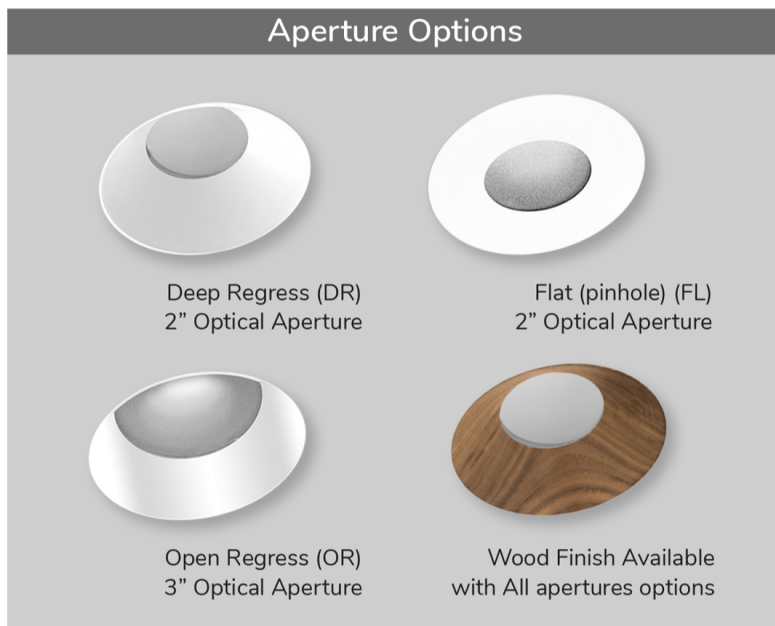
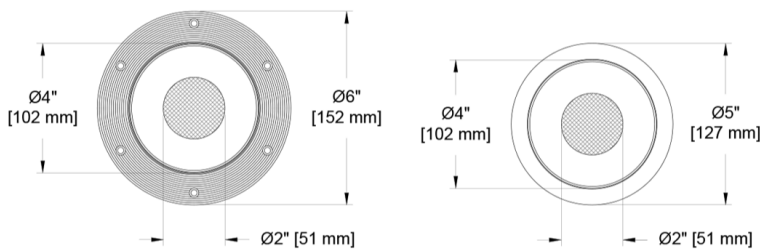


## The Core Family

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-RA)

#### 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
- Adjustable to 45° with 360° 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™, 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

Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: CR4D-RA-DR-Z-AU-C20-35-24-E2-P14-92A-91L-97L-CP

| FIXTURE                            | APERTURE              | TRIM                                           | MOUNTING                          | SOURCE / WATTS                                                    | CCT                                                                         | BEAM               | DRIVER / CONTROL                                                                                                                                                             | TRIM FINISH                                                                            | LENS ACCESSORIES                       | ACCESSORIES                                                       |
|------------------------------------|-----------------------|------------------------------------------------|-----------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------|
| CR4D-RA                            |                       |                                                |                                   |                                                                   |                                                                             |                    |                                                                                                                                                                              |                                                                                        |                                        |                                                                   |
| Core 4" Round Adjustable Downlight | DR<br>Deep Regress    | Flanged Trims                                  | Flanged Housings                  | Citizen                                                           | 24<br>2400K                                                                 | 15<br>Spot         | C1<br>0-10<br>1.0%, UNV (120-277V) linear                                                                                                                                    | W<br>White Paint                                                                       | Aperture Lens                          | EM<br>Emergency Pack                                              |
|                                    | OR<br>Open Regress    | F<br>Flanged Trim                              | U<br>Universal - Non-IC Housing   | C14 ●●<br>15W<br>1074Lm**<br>90+CRI, 60+R9                        | 27<br>2700K                                                                 | 24<br>Narrow Flood | C2<br>ELV/Triac<br>1.0%, (120V) linear                                                                                                                                       | B<br>Black Paint                                                                       | 91A<br>Solite                          | CP<br>Chicago Plenum                                              |
|                                    | FL<br>Flat (Pin Hole) | FS<br>Flanged Shower Trim*                     | AU ●●<br>Universal IC/Airtight    | C20 ●●<br>21W<br>1422Lm**<br>90+CRI, 60+R9                        | 30<br>3000K                                                                 | 40<br>Flood        | E1<br>0-10<br>0.1%, UNV (120-277V) log                                                                                                                                       | D<br>Wood*                                                                             | 93A<br>Frosted                         | Controls                                                          |
|                                    |                       | (for mounting choose from Flanged Housings)    | Flangeless Housings               | C28<br>30W*<br>2006Lm**<br>90+CRI, 60+R9                          | 35<br>3500K                                                                 | 55<br>Wide Flood   | E2<br>DALI-2<br>0.1%, UNV (120-277V) log                                                                                                                                     | PXX<br>Specialty Paint Color*                                                          | XXA<br>Other Aperture Lens Treatments* | LR<br>Lutron Wireless RF PowPak                                   |
|                                    |                       | Flangeless Trims                               | P<br>Plaster - Non-IC Housing     | Tunable                                                           | 40<br>4000K                                                                 |                    | E3<br>0-10<br>0.1%, UNV (120-277V) linear                                                                                                                                    | C<br>Custom/RAL Color**                                                                | Reflector (lamp) Media                 | ATH<br>Lutron Athena Wireless Node<br>Must be used with E2 driver |
|                                    |                       | Z<br>Flangeless Trim                           | AP ●●<br>Plaster IC/Airtight      | T9<br>10W<br>90+CRI, 60+R9<br>Tunable White                       | TW1840<br>1800-4000K<br>Tunable White w/ E1, E2, E3, E4                     |                    | E4^<br>DMX<br>0.1%, UNV (120-277V) Universal DMX Driver/Controller RGBW-DMX                                                                                                  | P01-P15                                                                                | 91L<br>Solite                          | CA<br>Casambi Wireless BLE to be paired with driver               |
|                                    |                       | ZS<br>Flangeless Shower Trim*                  | PM<br>Panel Mount                 | T15<br>15W<br>90+CRI, 60+R9<br>Tunable White                      | TW2765<br>2700-6500K<br>Tunable White w/ E1, E2, E3, E4                     |                    | ^ INCLUDES DMX/RDM COMPATIBLE DRIVER WITH BUILT-IN DECODER - CONTROLLER BY OTHERS                                                                                            | XXL<br>Other reflector (lamp) media*                                                   | 93L<br>Frosted                         |                                                                   |
|                                    |                       | (for mounting choose from Flangeless Housings) | APM ●●<br>Panel Mount Airtight/IC | T20 ●●<br>21W<br>90+CRI, 60+R9<br>Tunable White                   | RG1280<br>1200-8000K<br>RGBW<br>Dynamic Color Changing<br>Requires E2 or E4 |                    | TR2<br>TruPhase™<br>0.1%, (100-277V)<br>Up to 20W<br>Forward and Reverse compatible Phase Dimming<br>2 Dimming Curves: Linear/Logarithmic<br>Static White & Ambient Dim only | * Wood "D" selection to be used with Z trim and PM mounting - Refer to Wood Trim Guide | 97L<br>Black Hexcel Louver             |                                                                   |
|                                    |                       | * Aperture Lens Required                       | ●● Supports CA Title24 compliance | RGBW<br>90+CRI, 60+R9                                             | Ambient Dim™                                                                |                    | LD<br>Digital Ecosystem*<br>1.0%, UNV (120-277V)<br>ECO Hi-Lume<br>SoftOn/Fade-to-Black<br>LDE1                                                                              | ** Refer to Finish Guide                                                               | 99L<br>Black Hexcel Louver             |                                                                   |
|                                    |                       |                                                |                                   | A14 ●●<br>15W<br>858Lm<br>95+CRI, 90+R9                           | 2722*<br>2700-2200K<br>*A14 Only                                            |                    | * Not compatible with C28                                                                                                                                                    |                                                                                        |                                        |                                                                   |
|                                    |                       |                                                |                                   | A20 ●●<br>21W<br>95+CRI, 90+R9                                    | 3019<br>3000-1900K                                                          |                    |                                                                                                                                                                              |                                                                                        |                                        |                                                                   |
|                                    |                       |                                                |                                   | ●● Supports CA Title 24 Compliance to JA8 except in flat aperture | 3022*<br>3000-2200K<br>*A14 Only                                            |                    |                                                                                                                                                                              |                                                                                        |                                        |                                                                   |
|                                    |                       |                                                |                                   | ** Based on Deep Regress 24° beam                                 |                                                                             |                    |                                                                                                                                                                              |                                                                                        |                                        |                                                                   |

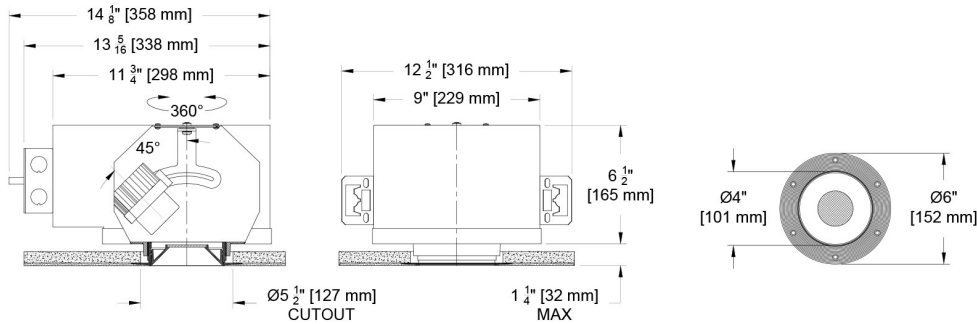
# Ceiling Cutouts and Dimensions

Deep Regress Shown - others similar

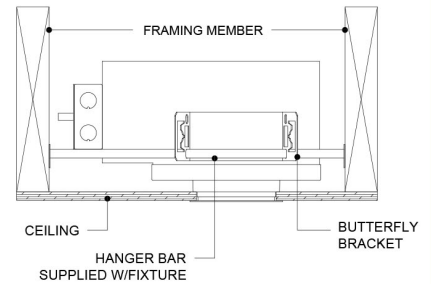
## Round Flangeless Housing

## Plaster Mount (P/AP)

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



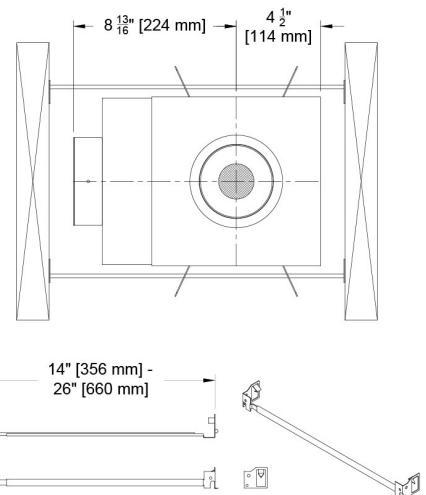
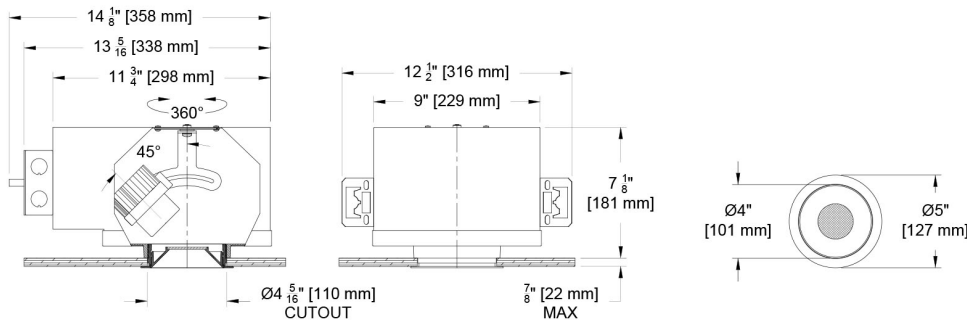
## Hanger Bar Detail



## Round Flanged Housing

## Flanged Mount (U/AU)

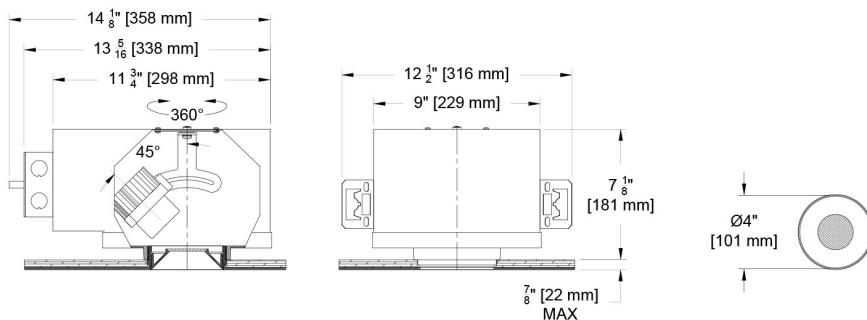
(CR4D-RA-DR -F-U/AU)



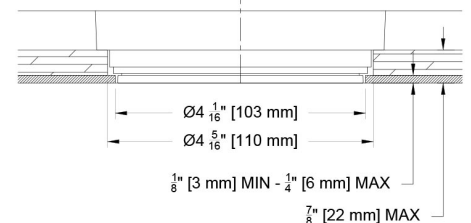
## Round Flangeless Housing

## Panel Mount (PM/APM)

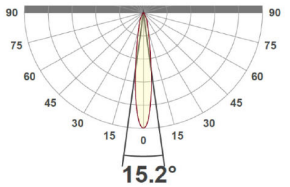
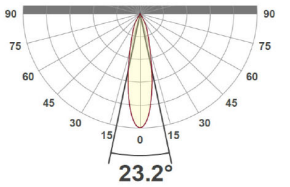
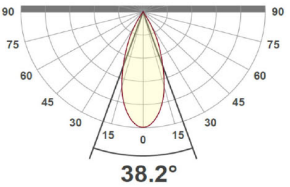
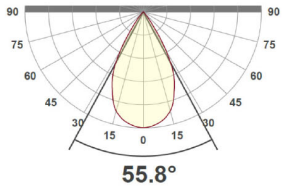
(CR4D-RA-DR -P-PM/APM)



## 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<br>Beamspreads                                                  |                 | 15°                                                                                |                             |                 |            |           | 24°                                                                                |                 |            |           |                             | 40°                                                                                 |            |           |                        |              | 55°                                                                                  |           |  |  |  |
|-----------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------|-----------------------------|-----------------|------------|-----------|------------------------------------------------------------------------------------|-----------------|------------|-----------|-----------------------------|-------------------------------------------------------------------------------------|------------|-----------|------------------------|--------------|--------------------------------------------------------------------------------------|-----------|--|--|--|
| Source                                                                |                 | System<br>watts (W)                                                                | Delivered<br>Lumens<br>(lm) | Lumens/<br>Watt | Peak<br>CD | 10% Field | Delivered<br>Lumens<br>(lm)                                                        | Lumens/<br>Watt | Peak<br>CD | 10% Field | Delivered<br>Lumens<br>(lm) | Lumens/<br>Watt                                                                     | Peak<br>CD | 10% Field | Del.<br>Lumens<br>(lm) | Lms/<br>Watt | Peak<br>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 data range. Measurements at 3000 CCT

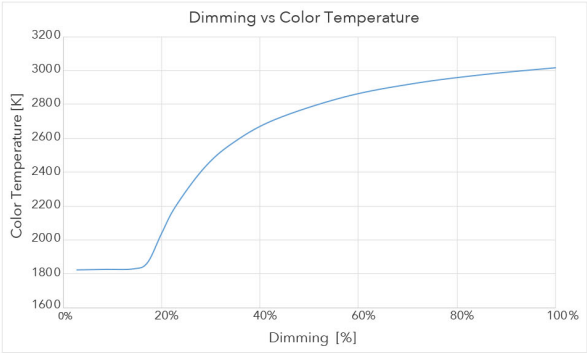
Citizen Sources - C14, C20 and C28

- <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

