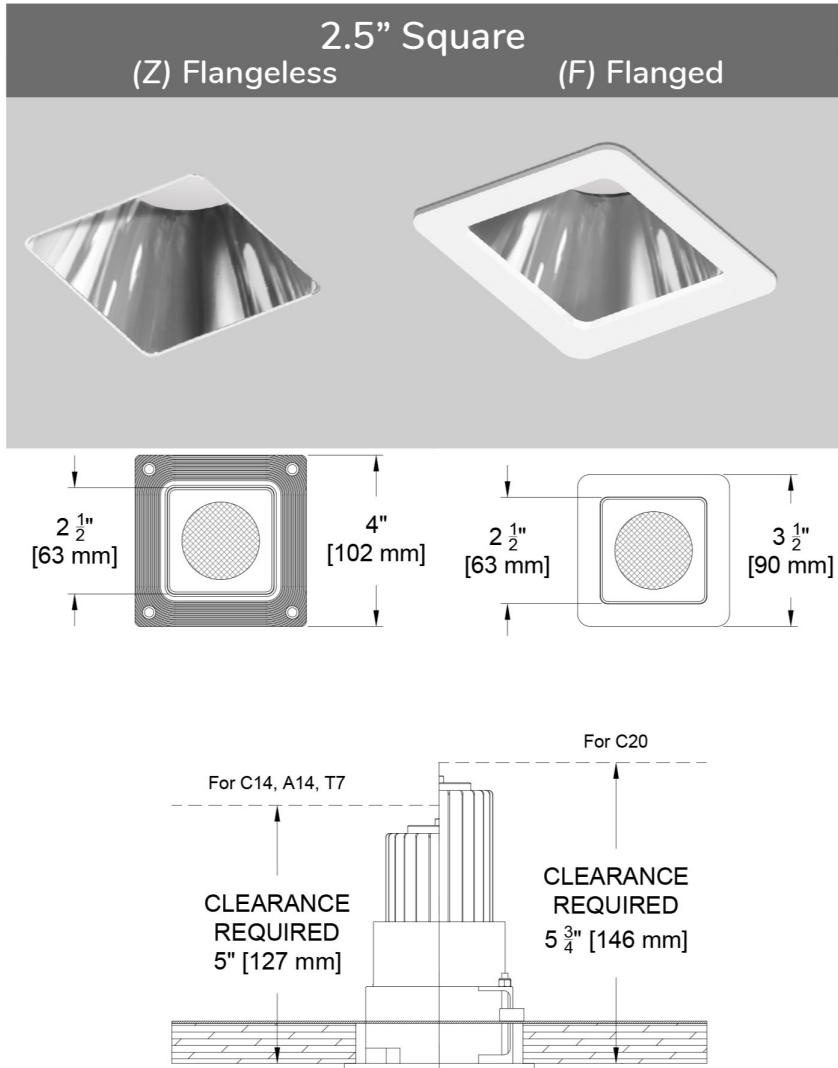


Scope Original

The Scope Original is a small aperture downlight family used to great acclaim in thousands of projects over the last 20 years. We have expanded this offering with new mounting options, a large selection of source technology and control options. This modifiable fixture has over 40 finish options including a wood trim selection. You have found the Square Downlight Datasheet and we hope you enjoy the details.



2.5" Aperture Options



Deep Regress (DR)



Wood Available (WD)

PROJECT:

TYPE:

SPECIFIER:

DATE:

Key Points (SCOD-S)

Trim

- Machined aluminum body in USA
- Wood trim bezel available on Flangeless option
- 40 color options + custom RAL available for trim flange and bezel. Finishes can be mixed and matched
- Flange or flangeless

Source / Optics

- 3 beam spreads - 15°, 22° and 36°
- Up to 1304 delivered lumens
- <2 MacAdams Ellipses (<2 SDCM)
- 90+ CRI, 60+ R9 Standard, 95+ CRI, 90+ R9 available with Ambient Dim option
- 2400K, 2700K, 3000K, 3500K, 4000K Ambient Dim and Tunable White Options Available
- **TITLE 24** Source supports California Title 24 compliance to JA8 requirements except for T7-1840 tunable white source
- Lifetime: L87B3>55,000 hours at 40° C ambient for fixed white

Housing

- 2 pan options, IC / Airtight rated for use in direct contact with insulation (not for spray foam)
- **NSF us** listed for damp location - wet rating with Shower Trim selection
- **TITLE 24** IC Rated / airtight housing approved for use in direct contact with insulation Chicago Plenum Available and supports CA Title 24 compliance
- Remodel or millwork option available

Driver And Control

- Drivers are integral with fixtures unless noted as remote mount with * in ordering code options. "K can" type drivers do not fit through the 2.5" hole
- TruPhase™, 0-10, DALI-2, DMX, Ecosystem or Wireless Control
- Flicker free to IEEE 1789-2015 available with EldoLED and TruPhase™
- Universal 120-277v

PERFORMANCE SUMMARY CHART					
	CITIZEN		TUNABLE WHITE®		AMBIENT DIM®
Source	CZ14	CZ20	T7	T7	AD14
CCT (color tune)			1840	2765	3019
Delivered Lumens	985	1340	418	513	680
Watts	14	20	10	10	15
Fixture Efficacy (LPW)	70	67	42	51	45

Data based on 22° beam at 3000K. Tunable white at mid-point CCT. Ambient Dim at full output
Tunable White 1840 does not meet Title 24 JA8 efficacy requirements

Ordering Codes

PROJECT:

SPECIFIER:

DATE:

TYPE:

QUANTITY:

Ordering Code Example: SCOD-S-F-NP-C20-30-22-C1-A32-A32-91L

Fixture	Trim	Mounting	Source / Watts	CCT	Beam	Driver / Control	Bezel Finish	Trim Finish	Lens Accessories	Accessories
SCOD-S										

Scope Original 2.5" Downlight - Square

F Flanged Trim
Z Flangeless Trim
FS Flanged Shower Trim*
ZS Flangeless Shower Trim*
*Requires aperture lens selection for wet listing

NP New Pan (IC/Airtight) for Mounting to bottom of wood studs^

BP Bracket Pan (IC/Airtight) for mounting with hanger bars to studs or T-bar^

AT Airtight / IC Housing*

PM Panel Mount §

RM Remodel mounts direct to ceiling - Wing Springs for flanged and drywall anchors for flangeless

● Supports CA Title 24 compliance to JA8 requirements

* Chicago Plenum available with AT

^Not for use with spray foam insulation

§ Must be used with flangeless trims.

Citizen

C14 14W 985Lm* 90+CRI, 60+R9

C20 21W 1340Lm* 90+CRI, 60+R9

Tunable

T7 10W 90+CRI, 60+R9 Tunable White

T20 21W 90+CRI, Tunable White

Ambient Dim™

A14 15W 95+CRI, 95+CRI, 90+R9

A20 21W 858Lm 95+CRI, 90+R9

* Based on 22° Beam
**1840 CCT does not meet Title 24
^Based on 2765 CCT
+LTT or EldoLED driver selection required and will be supplied with 2 Channel version

24 2400K
27 2700K
30 3000K
35 3500K
40 4000K

2400K
2700K
3000K
3500K
4000K

15 Spot
22 Narrow Flood
36 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
TW1840 1800-4000K Tunable White w/ E1, E2, E3, E4
TW2765 2700-6500K Tunable White w/ E1, E2, E3, E4

^ INCLUDES DMX/RDM COMPATIBLE DRIVER WITH BUILT-IN DECODER-CONTROLLER BY OTHERS

2722* 2700-2200K *A14 Only
3019 3000-1900K
3022 * 3000-2200K *A14 Only
* Not compliant with California Title 24

TR2 TruPhase™ 0.1%, (120-277V) log Up to 20W
Forward and Reverse compatible Phase Dimming
Static White & Ambient Dim only
LD Digital Ecosystem* 1.0%, UNV (120-277V) ECO Hi-Lume SoftOn/Fade-to-Black LDE1
* Requires remote mounting

A01 Black Anodize
A32 Clear Aluminum Anodize
AXX Other Anodize colors*
A1-A36

A01 Black Anodize
A32 Clear Aluminum Anodize
AXX Specialty anodize color*
A1-A36

D Wood**
PXX Specialty Paint Color*
P01-P15

W White Paint
PXX Specialty Paint Color*
P01-P15

C Custom/RAL Color*
C Custom/RAL Color*
K Blank for use with Flangeless or Panel Mount

WOOD TRIM GUIDE
*See Finish Guide
**See Wood Guide

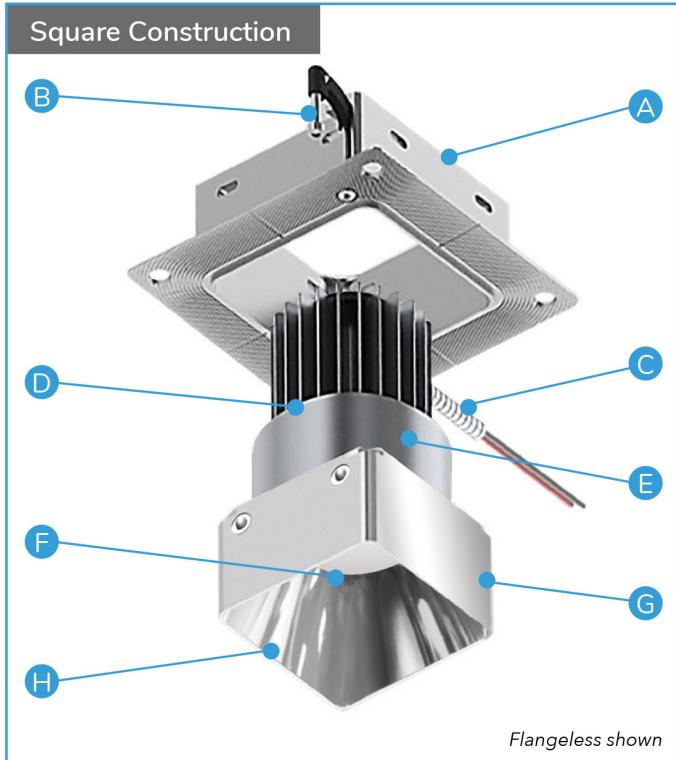
FINISH GUIDE LINK
*See Finish Guide
**See Wood Guide

Reflector (lamp) Media
91L Solite
92L Supertex (spreader lens)
97L Black Hexcel Louver
XXL Other reflector (lamp) media*
* See Lens Accessory Guide

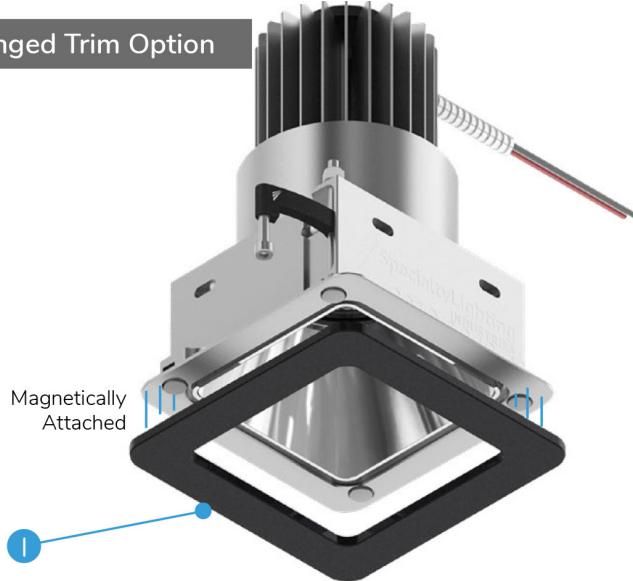
CP Chicago Plenum
EM Emergency Pack
Controls
LR Lutron Wireless RF PowPak
ATH Lutron Athena Wireless Node
* Must be used with E2 driver (DALI-2)
CA Casambi Wireless BLE to be paired with driver

Fixture Details

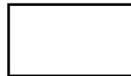
Machined receiver with integral trim holder / plaster flange attaches to pan or housing with ceiling clamps. Light engine and trim bezel attaches to receiver with ball plungers



Flanged Trim Option



Flanged Finish Options



White
P14



A01 Black
Anodize



A32 Clear
Anodize



Anodized
AXX



Powder Coat
PXX



Custom
C

Trim Bezel Finish Options



Black
A01



Clear
A32



Anodized
AXX



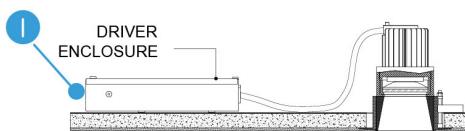
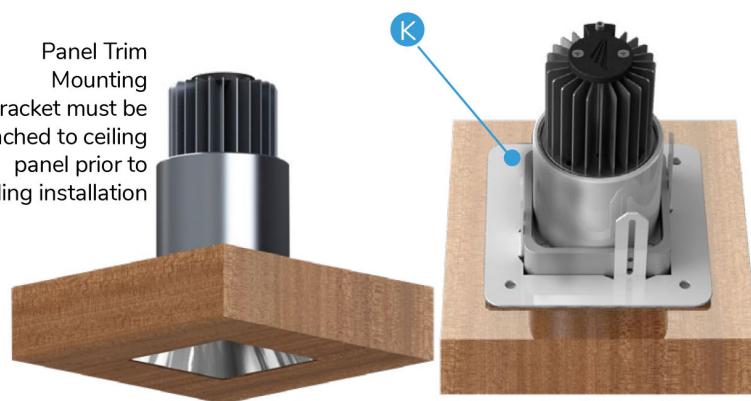
Powder Coat
PXX



Custom
C

Panel Trim Option

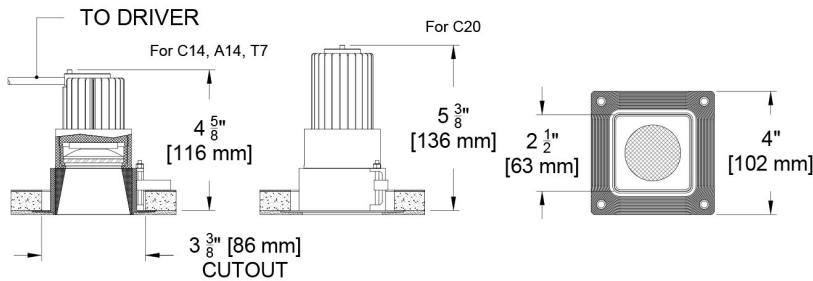
Panel Trim
Mounting
bracket must be
attached to ceiling
panel prior to
ceiling installation



Ceiling Cutouts and Dimensions

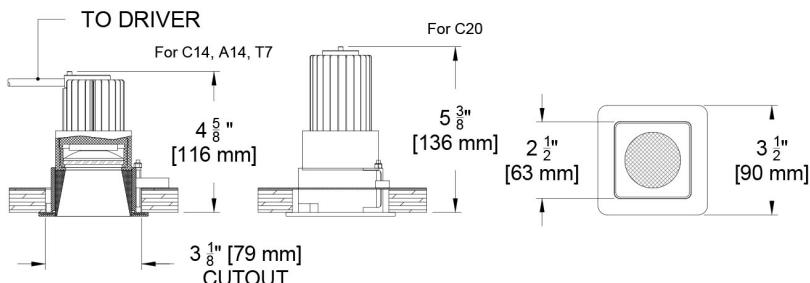
Square New or Bracket Pan Flangeless Trim (Z)

(SCOD-S-DR-Z-BP / NP-)



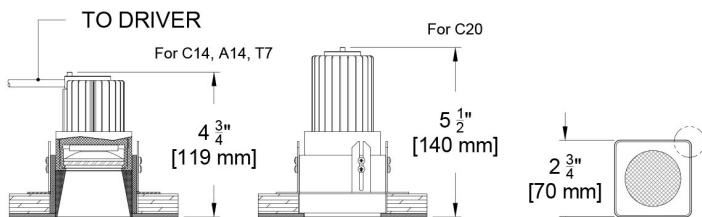
Square New or Bracket Pan Flanged Trim (F)

(SCOD-S-DR-F-BP / NP-)

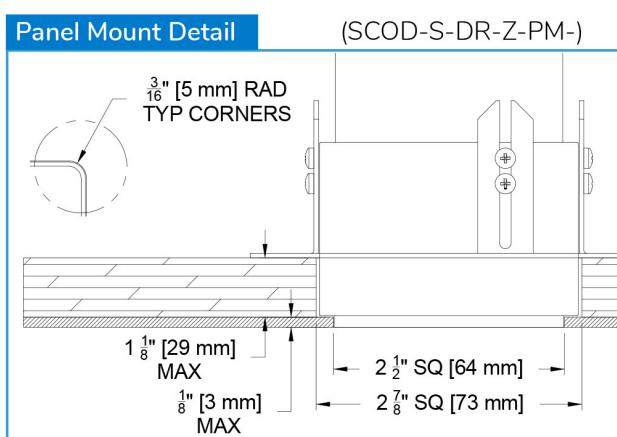


Square Panel Mount

(SCOD-S-DR-Z-PM-)



Panel Mount Detail



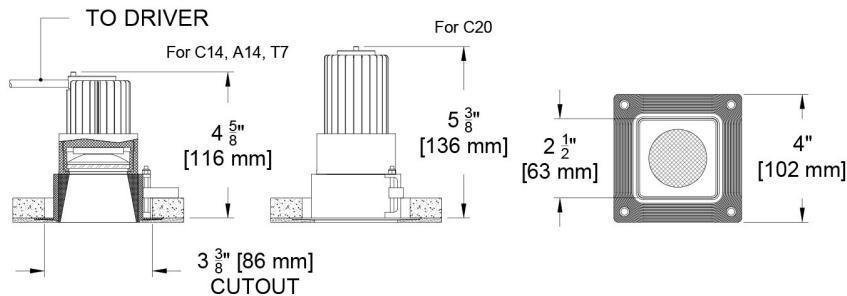
(SCOD-S-DR-Z-PM-)

Ceiling Cutouts and Dimensions

Square Remodel

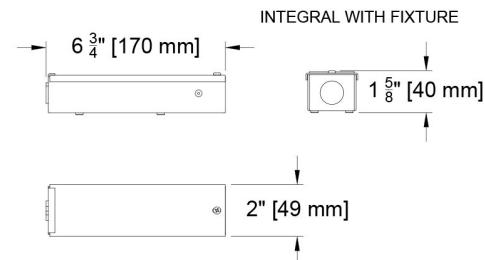
Flangeless Trim (Z)

(SCOD-S-DR-Z-RM-)



Driver Enclosure

for C1, C2, TR2



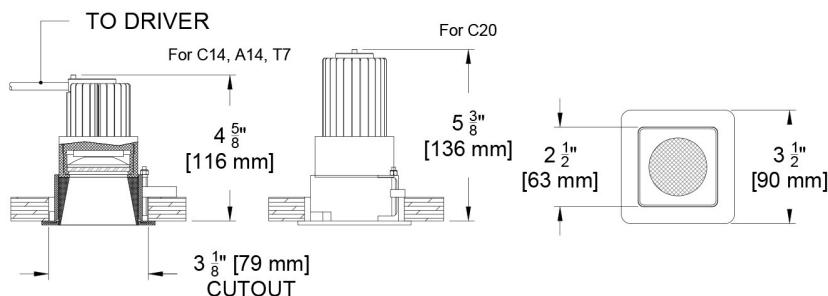
Driver Enclosure

for E1, E2, E3, E4, LD

Square Remodel

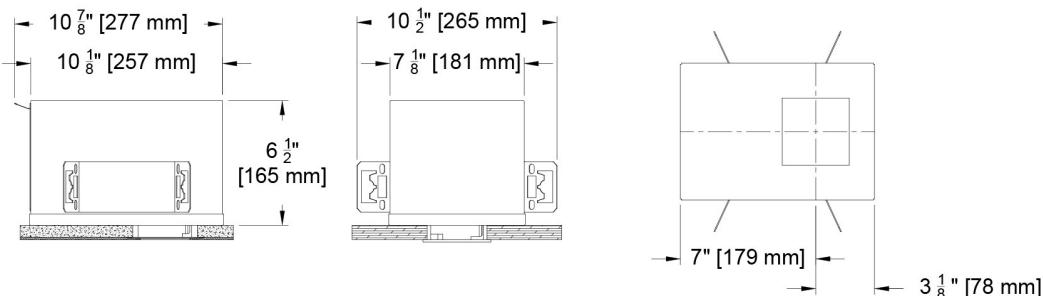
Flanged Trim (F)

(SCOD-S-DR-F-RM-)



Square Airtight (AT)

(SCOD-S-DR--AT-)

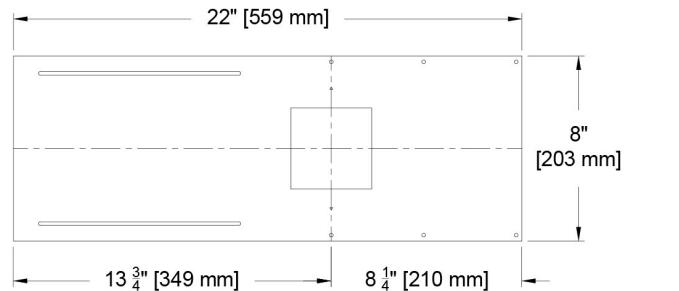
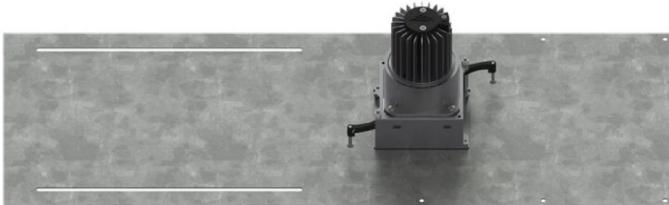


Mounting Options

New Pan

(SCOD-S-X-X-NP)

For new construction and attachment to bottom of studs

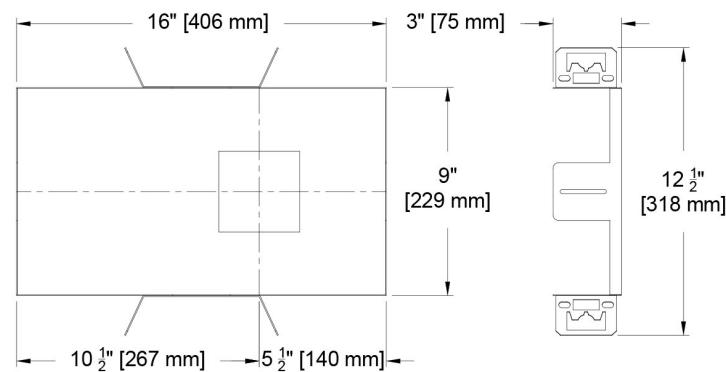


Bracket Pan

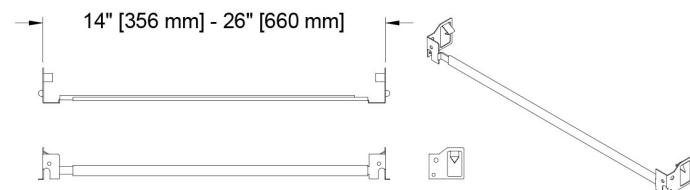
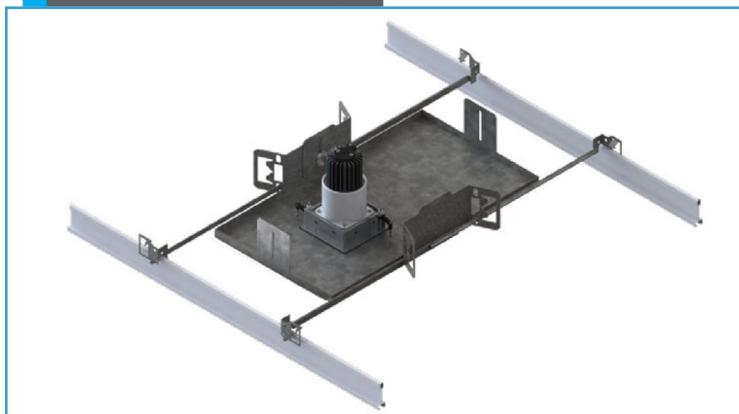
(SCOD-S-X-X-BP)

For new construction using hanger bars for attaching to studs or drop ceiling

Option 1- Attaching to Studs



Option 2- Attaching to Drop Ceiling



Note: For panel trim mounting see page 3 for picture of detail or refer to installation instructions

Photometric Table

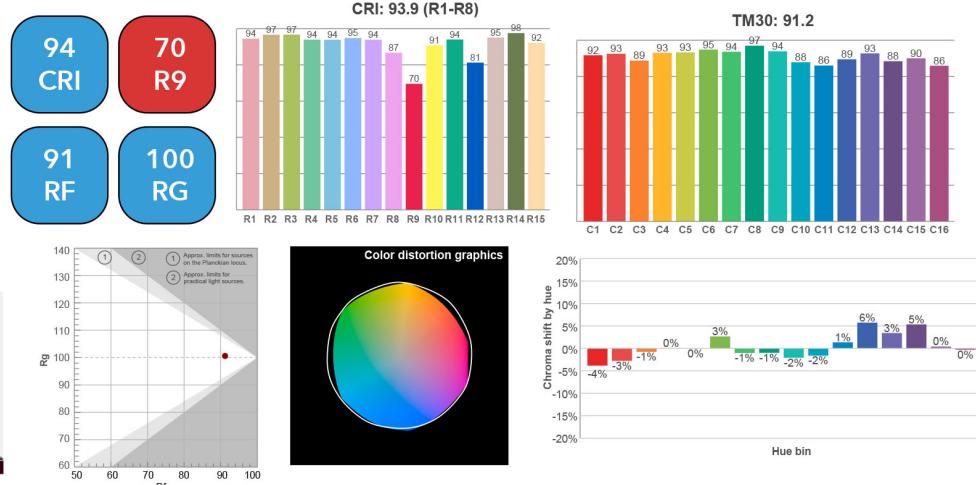
All data below are delivered lumens based on goniometer measurements of production representative product. All lumen values can vary +/- 10% from LED manufacturer rated flux range.

SQUARE Beamspreads		10°						20°						30°									
Source		System watts (W)	Delivered Lumens (lm)	Lumens/Watt	UGR	Peak cd	10% Field	Delivered Lumens (lm)	Lumens/Watt	UGR	Peak cd	10% Field	Delivered Lumens (lm)	Lumens/Watt	UGR	Peak cd	10% Field						
Deep Recess	Citizen C14	14	947	68	29	5411	45°	985	70	29	3895	53°	870	62	31	1786	70°						
	Citizen C20	21	1304	62	31	7266	46°	1340	64	30	5371	53°	1294	62	32	2703	69°						
	Ambient Dim A14	15	660	45	28	4483	39°	680	46	28	2934	50°	657	45	29	1410	68°						
	Tunable White 1840	10	391	39	22	2264	41°	418	42	22	2007	45°	411	42	24	892	67°						
	Tunable White 2765	10	501	51	22	2885	41°	513	52	22	2539	45°	526	53	25	1182	67°						
	CCT Multiplier																						
CCT		Beam angle						Beam angle						Beam angle									
2700		90						90						90									
3000		75						75						75									
3500		60						60						60									
4000		45						45						45									
4500		30						30						30									
5000		15						15						15									
5500		0						0						0									
6000		15						15						15									
6500		30						30						30									
7000		45						45						45									
7500		60						60						60									
8000		75						75						75									
8500		90						90						90									
9000		90						90						90									
9500		90						90						90									
10000		90						90						90									
10500		90						90						90									
11000		90						90						90									
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19500		90						90						90									
20000		90						90						90									
20500		90						90						90									
21000		90						90						90									
21500		90						90						90									
22000		90						90						90									
22500		90						90						90									
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24000		90						90						90									
24500		90						90						90									
25000		90</																					

Color Data

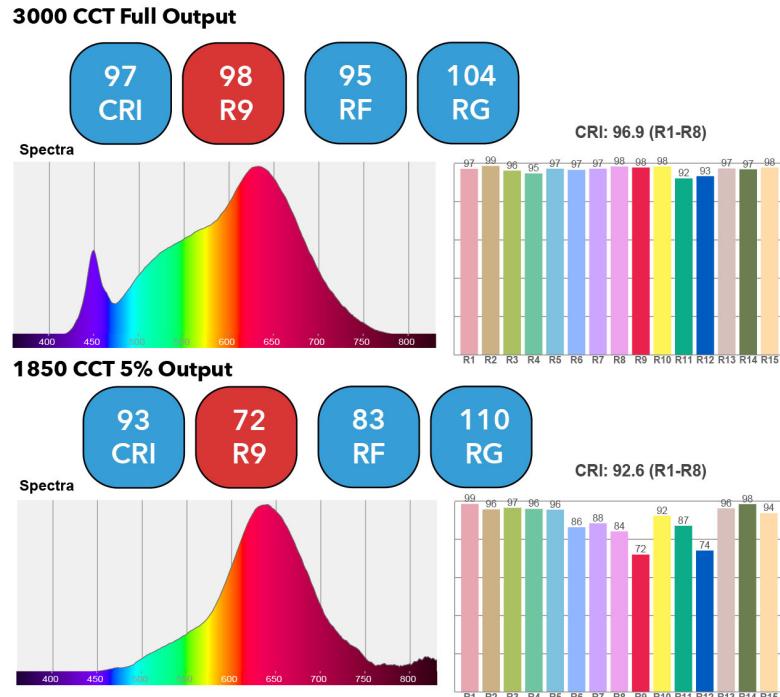
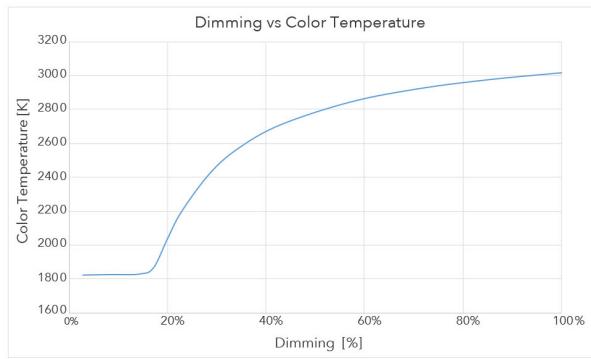
Citizen C20 and C14

- <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



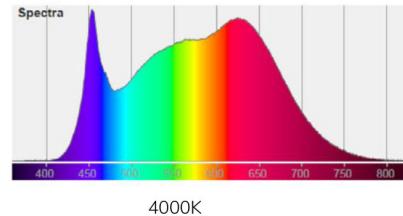
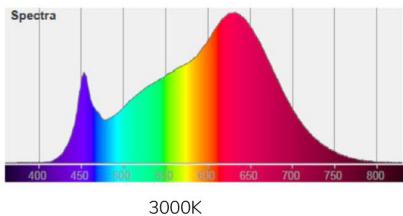
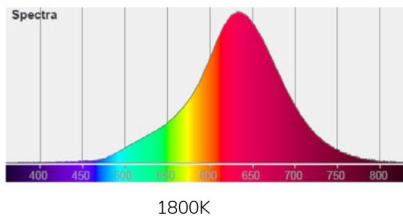
Tunable White 1800k to 4000k

- <3 MacAdam Ellipse (<3 SDCM)
- 94 CRI average across all CCTs
- 76 R9 average across all CCTs
- Available with wired or wireless control

Spectral Power Distributions at all listed CCTs available upon request

INK	TUNABLE WHITE - 1800-4000K						
Color Temp	1800	2200	2500	2700	3000	3500	4000
System Watts	10	10	10	10	10	10	10
Delivered Lumens	379	433	468	491	539	571	571
Luminaire Efficiency	40	46	49	52	57	60	60

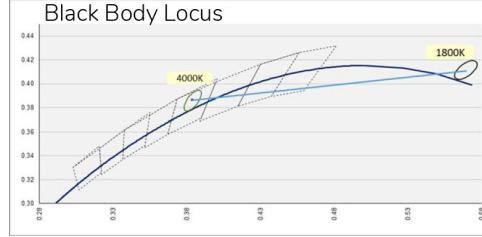
Flux and Color data based on 20° measurement at 2700k. All other values are extrapolated from actual and analytical tests



1800K

3000K

4000K



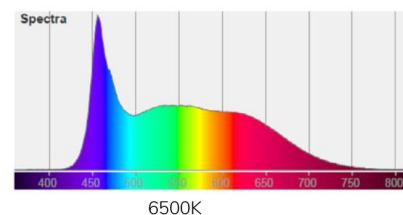
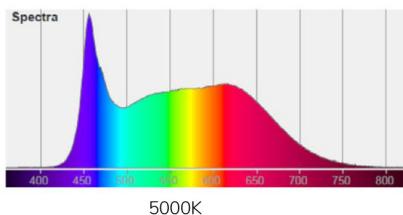
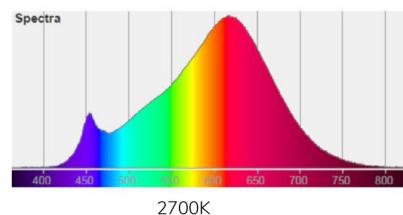
Tunable White 2700k to 6500k

- <3 MacAdam Ellipse (<3 SDCM)
- 94 CRI average across all CCTs
- 96 R9 average across all CCTs
- Available with wired or wireless control

Spectral Power Distributions at all listed CCTs available upon request

INK	TUNABLE WHITE - 2700-6500K								
Color Temp	2700	3000	3500	4000	4500	5000	5500	6000	6500
System Watts	10	10	10	10	10	10	10	10	10
Delivered Lumens	602	620	640	640	640	639	638	636	644
Luminaire Efficiency	63	65	67	67	67	67	67	67	68

Flux and Color data based on 20° measurement at 4500k. All other values are extrapolated from actual and analytical tests



2700K

5000K

6500K

