

C Series

Project:	Type:
Product Code:	Date:

V 020625



4" & 6" Downlighting

Quick Shipping Streamlined options mean most configurations can ship in 2 days

Brightness Switch Option Accommodate varying lumen output needs with the flip of a switch, or choose a fixed output option

Universal Installation Features pre-installed bar hangers with butterfly brackets to accommodate a range of mounting methods

Embedded Drivers Allow for touch safe, plug & play installation and serviceability all from below the ceiling

INSTALLATION

Ceiling Thickness

New Construction: 5/8" up to 1 1/4"

Ceiling Material

Drywall, ACT

TRIMS

Aperture

4", 6"

Shape

Round

Style

Standard

Finish

White, Semi-Specular with White Flange

LIGHT OUTPUT & DISTRIBUTION

Module

Downlight

Lumens (Power)

Integrated Brightness Switch
1000 lm (13.6W), 1500 lm (17W),
2000 lm (24.5W)

Color Quality

80+ CRI, 3-step SDCM

Color Temperature

 3000K  3500K  4000K

Beam Spread

 General Ambient (90°+)

WARRANTY

5 year limited warranty; 50,000 hours

POWER & CONTROLS

Input Voltage

120/277 V

Dimming

0-10V (5%)

Emergency

Optional Remote Inverter or Emergency LED Driver for lighting up to 90 minutes in event of power failure


RATINGS & CERTIFICATIONS

Housing

 RoHS Compliant

Module & Trims

 UL Listed for Wet Location
(Under Covered Ceilings)

 NSF Listed
(White Finish Only)

 Non-Conductive Dead Front



Declare.





DMF LightSpeed
 Highlighted selections will ship in 2 days
 All other items will ship in 5 days or less

PRODUCT BUILDER - EMBEDDED 0-10V DRIVER

HOUSING

PRODUCT CODE		APPLICATION		EMERGENCY	
		NCRN			
C4	4" Housing	NCRN	New Construction, Round, Non-IC	[Blank]	None
C6	6" Housing			OEMS	0-10V, Emergency Remote Test Switch

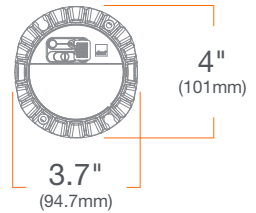
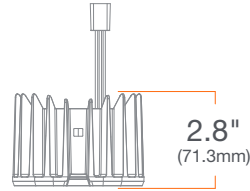
C MODULE

PRODUCT CODE		LUMENS		CRI		CCT		BEAM SPREAD		DIMMING	
	CM				8				WF		O
CM	Downlight Module	FX	1000/1500/2000lm Selectable	8	80+	30	3000K	WF	General Ambient (90°+)	O	0-10V
		10	1000lm			35	3500K				
		15	1500lm			40	4000K				
		20	2000lm								

TRIM

PRODUCT CODE		FINISH	
C4TRS	4" Round Standard	WH	White
C6TRS	6" Round Standard	SP	Semi-Specular with White Flange

MODULE



SUMMARY

CCT	3000K, 3500K, 4000K
LUMENS (POWER)	1000lm (13.6W), 1500lm (17W), 2000lm (24.5W)
EFFICACY	74 lm/W, 88 lm/W, 82 lm/W
COLOR QUALITY	80+ CRI ¹ , 3-step SDCM
BEAM SPREAD	General Ambient (90°+)
DIMMING	0-10V (5%)
LED CHIP	Cree
LISTINGS	ENERGY STAR® Qualified ² , UL Listed for Wet Location, UL Certified US-CA, Declare, RoHS compliant, NSF/ANSI 2 listed, Suitable for splash-zone ³ , Compliant to FCC Title 47 Part 15; Class B

¹ Tested in accordance to IESNA LM-79-2008

² Refer to ENERGY STAR Certified light fixtures database

³ This product is evaluated in accordance to NSF/ANSI 2 for Splash Zones having designated trim finishes.

ADDITIONAL

INPUT VOLTAGE: 120V/277V, 50/60Hz

MAX INPUT CURRENT:

1000lm: 0.113 (120V) / 0.062 (277V)

1500lm: 0.142 (120V) / 0.074 (277V)

2000lm: 0.204 (120V) / 0.095 (277V)

CONNECTOR: 6 pin Molex

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

AMBIENT OPERATING TEMPERATURE: -20°C to 40°C

WARRANTY: 5 year limited warranty; 50,000 hours at 70% lumen maintenance

MODULE PERFORMANCE

Based on 80 CRI, 3000K Module

		WHITE TRIM			SEMI-SPECULAR TRIM		
		10	15	20	10	15	20
4"	Lumens	1131	1417	1913	1126	1414	1892
	LPW ¹	83	83	78	83	83	77
	CBCP ²	532	666	901	684	855	1147
	UGR ³	21.1	21.9	23	19.2	20.1	21.1
6"	Lumens	1156	1446	1945	1155	1444	1939
	LPW	85	85	79	85	85	79
	CBCP	545	682	918	656	821	1103
	UGR	21.3	22.1	23	19.1	19.8	20.8

	30K	35K	40K
CCT MULTIPLIER	1	1.03	1.05

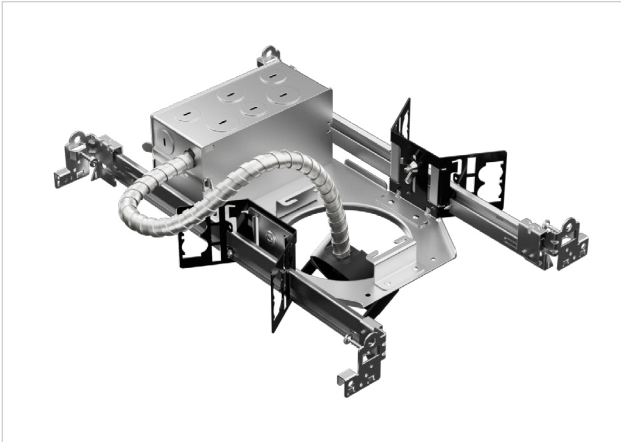
EMERGENCY BATTERY	LPW x 5
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¹ LPW: Lumens per watt

² CBCP: Center beam candlepower

³ UGR: Unified glare ratio (0.7/0.5/0.2, 4H/8H)

HOUSING



4" New Construction

C4NCRN New Construction

C4NCRNOEMS Emergency

SUMMARY

JUNCTION BOX:

C4NCRN: Equipped with 9 knockouts: four 3/4" and two 1" trade size knockouts on top, three 3/4" trade size knockouts on sides.

Approved for 8 (four in, four out) #12 AWG 70°C

C4NCRNOEMS: Equipped with 8 knockouts four 3/4" and two 1" trade size knockouts on top, two 3/4" trade size knockouts on sides. Approved for 8 (four in, four out) #12 AWG 70°C

BAR HANGER MOUNTING:

The pre installed butterfly bracket and adjustable bar hangers are compatible with traditional joist or stud, Armstrong, Hat Channel, and T Bar and can accommodate the following spacing:

Standard: 14" and 24" joist spacing

Modified: Breaking sections of the scored bar hangers can accommodate 11-24"

ADDITIONAL MOUNTING OPTIONS:

When pre-installed barhangers are removed, the Butterfly Bracket provides mounting features for C Channel Bar, 1/2" Pipe and Steel Bar. Install these according to local regulations when required.

CEILING THICKNESS RANGE:

Pre-Installed Butterfly Brackets allow for vertical adjustment of barhangers up to 1 1/4"

New Construction: 5/8" - 1 1/4"

Emergency: 5/8" to 1 1/4"

CUTOUT: 4 1/2" (114mm) round opening

EMERGENCY BATTERY SPECIFICATION

EMERGENCY BATTERY: Emergency Battery Back up is designed to provide output for 90 minutes when in an emergency state

INPUT VOLTAGE: 120/277V 50/60Hz

ILLUMINATION TIME: 90min

WATTAGE IN EM STATE: 5W

LUMEN OUTPUT IN EM STATE: LPW x 5

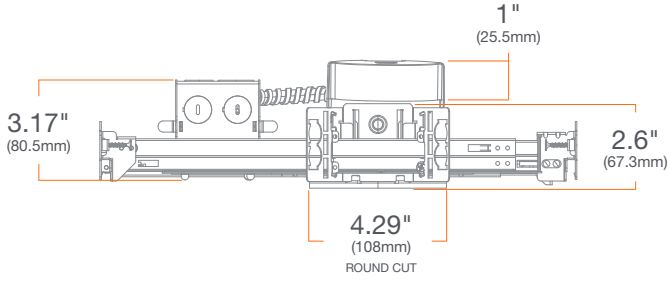
REMOTE TEST SWITCH: Must be installed according to local code

LISTING: Compliant to FCC Title 47 Part 15; Class B

WARRANTY: 5 year limited warranty

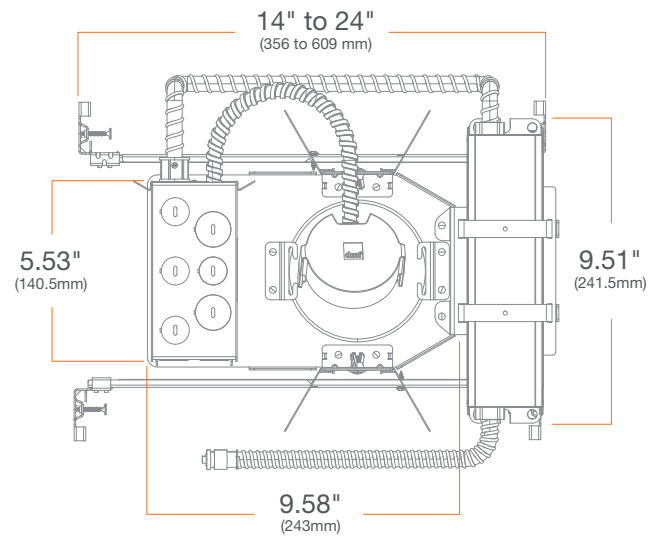
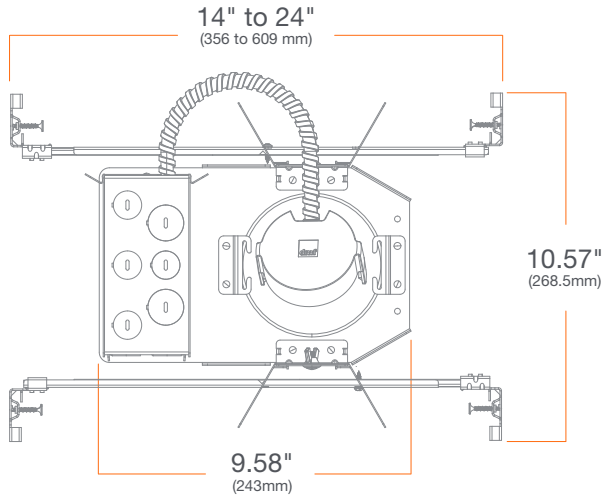
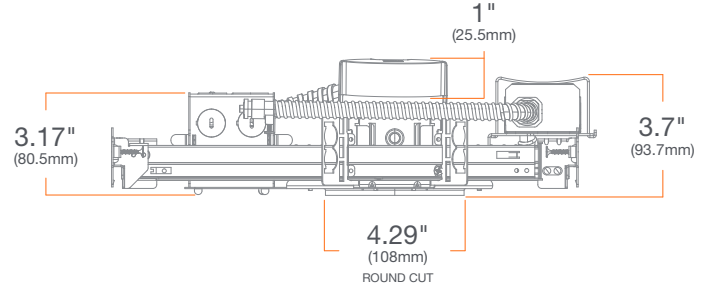
4" New Construction

C4NCRN



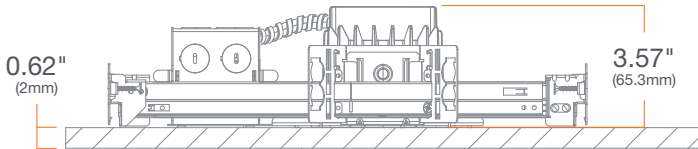
4" Emergency

C4NCRNOEMS



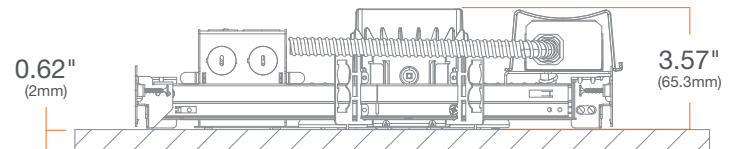
Total Height in Plenum

C4NCRN

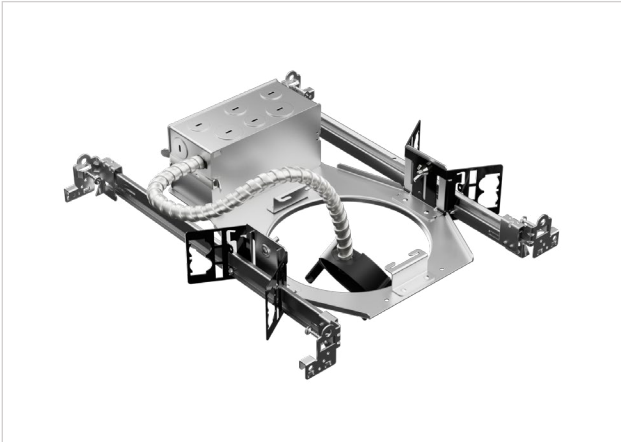


Total Height in Plenum

C4NCRNOEMS



HOUSING



6" New Construction

C6NCRN New Construction

C6NCRNOEMS Emergency

SUMMARY

JUNCTION BOX:

C6NCRN: Equipped with 9 knockouts: four 3/4" and two 1" trade size knockouts on top, three 3/4" trade size knockouts on sides. Approved for 8 (four in, four out) #12 AWG 70°C

C6NCRNOEMS: Equipped with 8 knockouts four 3/4" and two 1" trade size knockouts on top, two 3/4" trade size knockouts on sides. Approved for 8 (four in, four out) #12 AWG 70°C

BAR HANGER MOUNTING: The pre installed butterfly bracket and adjustable bar hangers are compatible with traditional joist or stud, Armstrong, Hat Channel, and T Bar and can accommodate the following spacing:

Standard: 14" and 24" joist spacing

Modified: Breaking sections of the scored bar hangers can accommodate 11-24"

ADDITIONAL MOUNTING OPTIONS: When pre-installed bar hangers are removed, the Butterfly Bracket provides mounting features for C Channel Bar, 1/2" Pipe and Steel Bar. Install these according to local regulations when required.

CEILING THICKNESS RANGE: Pre-Installed Butterfly Brackets allow for vertical adjustment of bar hangers up to 1 1/4"

New Construction: 5/8" - 1 1/4"

Emergency: 5/8" to 1 1/4"

CUTOUT: 6 1/2" (165mm)

EMERGENCY BATTERY SPECIFICATION

EMERGENCY BATTERY: Emergency Battery Back up is designed to provide output for 90 minutes when in an emergency state

INPUT VOLTAGE: 120/277V 50/60Hz

ILLUMINATION TIME: 90min

WATTAGE IN EM STATE: 5W

LUMEN OUTPUT IN EM STATE: LPW x 5

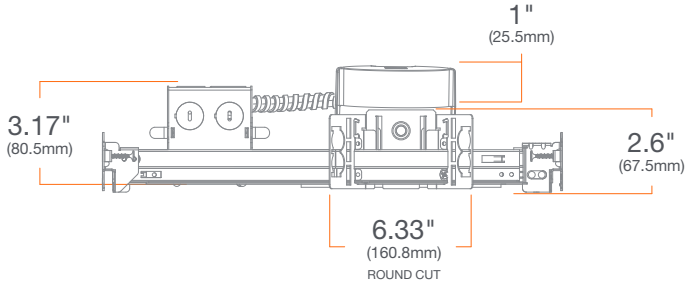
REMOTE TEST SWITCH: Must be installed according to local code

LISTING: Compliant to FCC Title 47 Part 15; Class B

WARRANTY: 5 year limited warranty

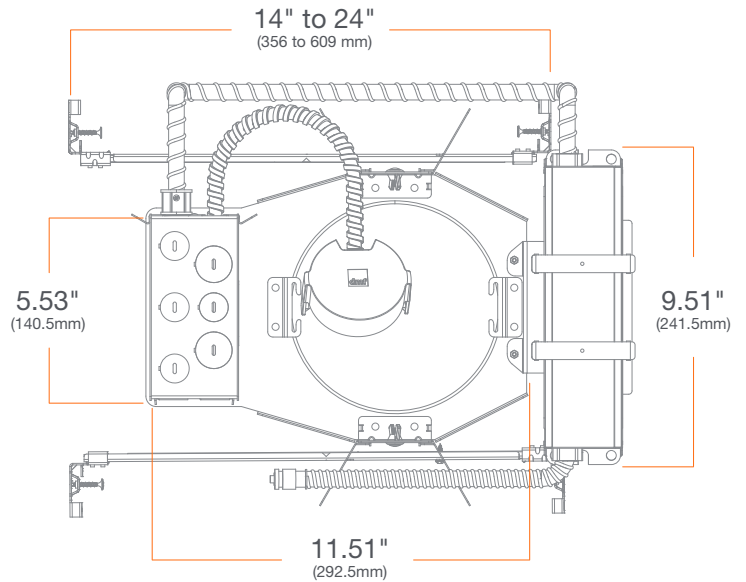
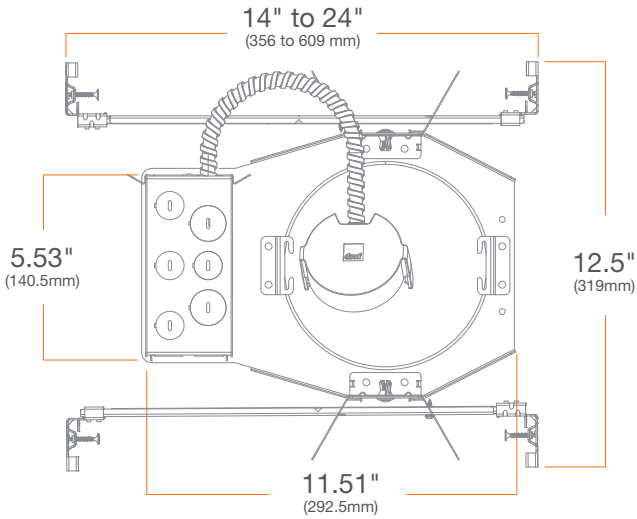
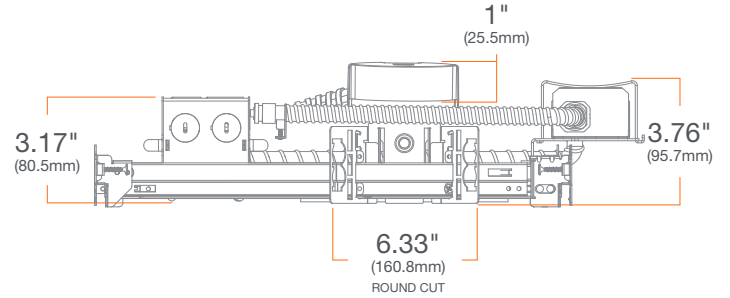
6" New Construction

C6NCRN



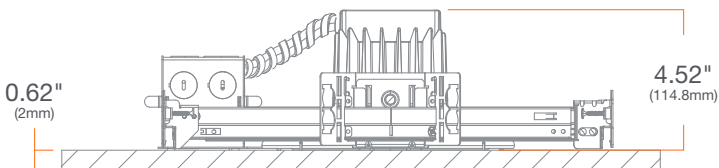
6" Emergency

C6NCRNOEMS



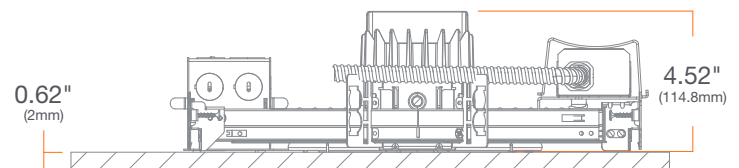
Total Height in Plenum

C6NCRN



Total Height in Plenum

C6NCRNOEMS



TRIMS



Round Trims

C4TR 4"

C6TR 6"

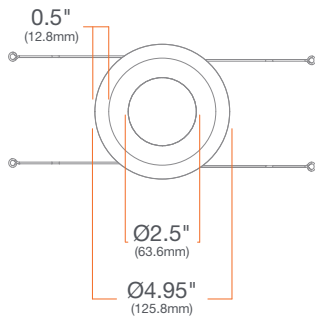
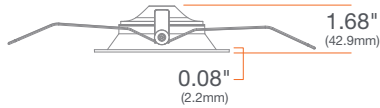
SUMMARY

CONSTRUCTION: Injection molded polycarbonate with torsion springs

LISTINGS: Non-conductive dead front trim ring and baffle

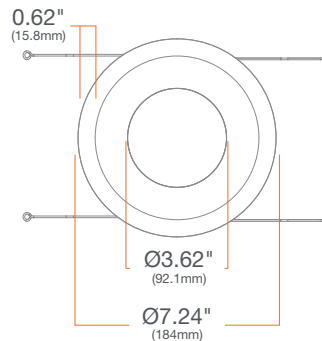
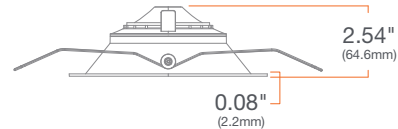
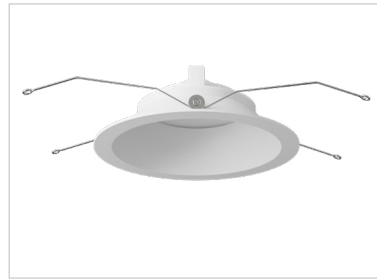
4" Standard Round

C4TRSWH



6" Standard Round

C6TRSWH

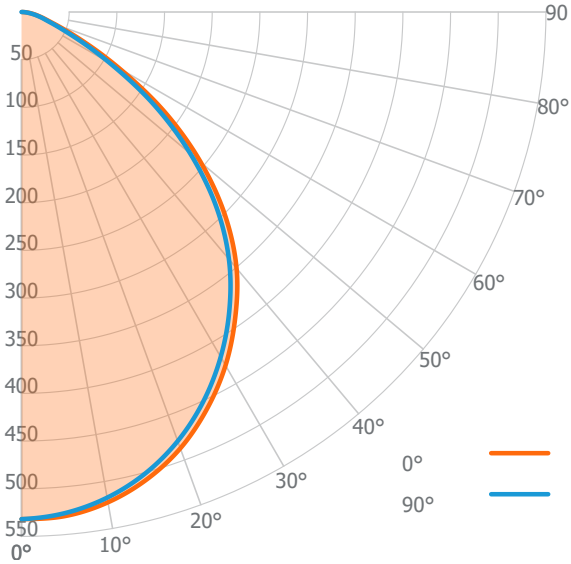


PHOTOMETRY

1000 lm, 3000K, General Ambient **CM10830WFO**

4" Standard Round, White **C4TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	532
5°	531
10°	522
15°	508
20°	487
25°	460
30°	428
35°	391
40°	351
45°	302
50°	246
55°	184
60°	119
65°	68
70°	37
75°	22
80°	13
85°	6
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	404	36%
0° - 40°	645	57%
0° - 60°	1031	91%
0° - 90°	1129	100%
0° - 180°	1129	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	59.1 fc	6.7 ft
6 ft	14.8 fc	13.4 ft
9 ft	6.6 fc	20.1 ft
12 ft	3.7 fc	26.8 ft

Input Watts: 13.6W

Lumens: 1129lm

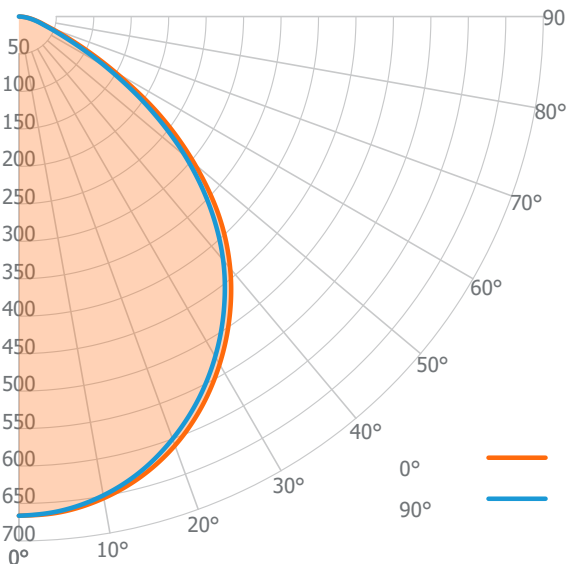
Efficacy: 83lm/W

Beam Angle: 96° x 94°

1500 lm, 3000K, General Ambient **CM15830WFO**

4" Standard Round, White **C4TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	666
5°	664
10°	653
15°	635
20°	609
25°	576
30°	536
35°	490
40°	439
45°	379
50°	307
55°	230
60°	148
65°	85
70°	46
75°	28
80°	17
85°	7
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	507	36%
0° - 40°	808	57%
0° - 60°	1290	91%
0° - 90°	1414	100%
0° - 180°	1414	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	74.0 fc	6.7 ft
6 ft	18.5 fc	13.4 ft
9 ft	8.2 fc	20.1 ft
12 ft	4.6 fc	26.8 ft

Input Watts: 17W

Lumens: 1414lm

Efficacy: 83lm/W

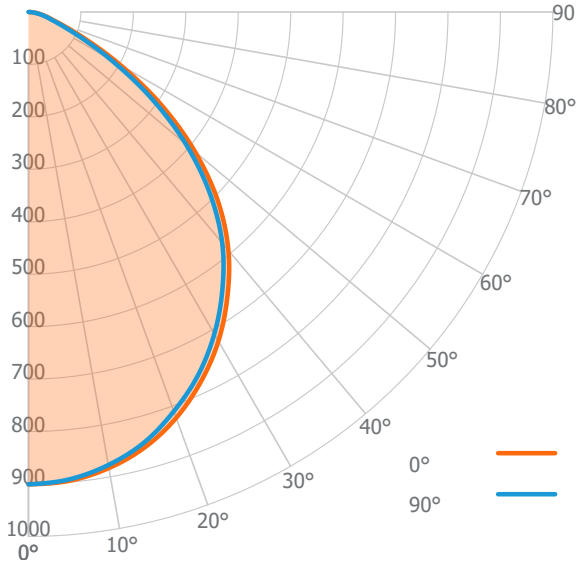
Beam Angle: 96° x 94°

PHOTOMETRY

2000 lm, 3000K, General Ambient **CM10830WFO**

4" Standard Round, White **C4TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	901
5°	897
10°	883
15°	859
20°	824
25°	778
30°	725
35°	662
40°	593
45°	511
50°	415
55°	310
60°	203
65°	115
70°	62
75°	38
80°	23
85°	10
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	684	36%
0° - 40°	1092	57%
0° - 60°	1743	91%
0° - 90°	1909	100%
0° - 180°	1910	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	100.1 fc	6.7 ft
6 ft	25.0 fc	13.4 ft
9 ft	11.1 fc	20.1 ft
12 ft	6.3 fc	26.8 ft

Input Watts: 24.5W

Lumens: 1910lm

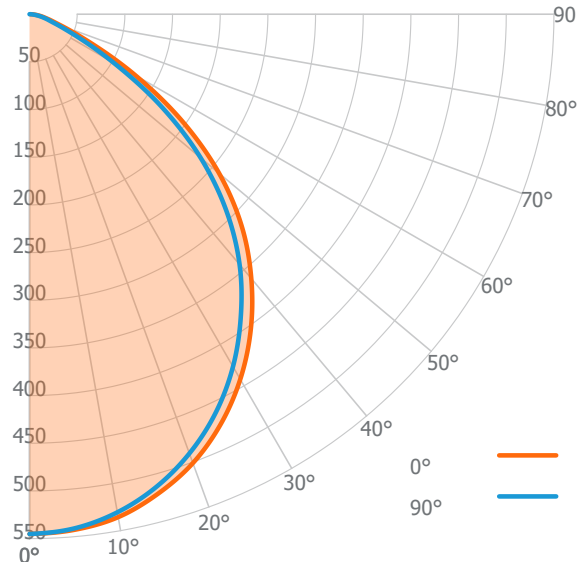
Efficacy: 78lm/W

Beam Angle: 96° x 94°

1000 lm, 3000K, General Ambient **CM10830WFO**

6" Standard Round, White **C6TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	545
5°	543
10°	536
15°	521
20°	501
25°	474
30°	442
35°	404
40°	362
45°	315
50°	260
55°	196
60°	128
65°	69
70°	36
75°	21
80°	13
85°	6
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	415	36%
0° - 40°	662	57%
0° - 60°	1058	92%
0° - 90°	1154	100%
0° - 180°	1154	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	60.6 fc	6.9 ft
6 ft	15.1 fc	13.7 ft
9 ft	6.7 fc	20.6 ft
12 ft	3.8 fc	27.4 ft

Input Watts: 13.6W

Lumens: 1154lm

Efficacy: 85lm/W

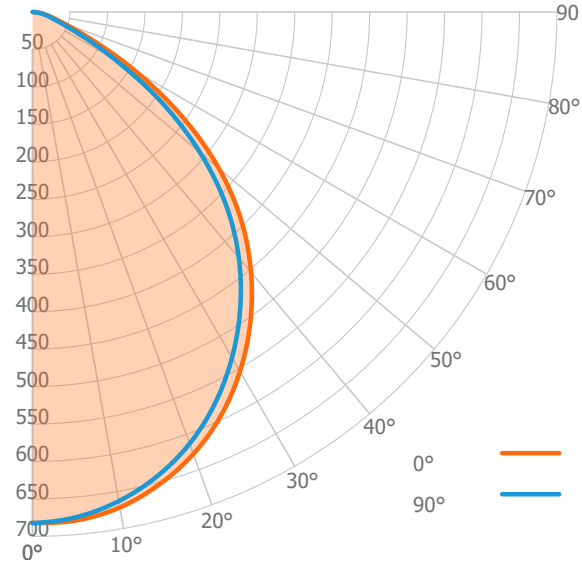
Beam Angle: 98° x 93°

PHOTOMETRY

1500 lm, 3000K, General Ambient **CM10830WFO**

6" Standard Round, White **C6TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	682
5°	681
10°	672
15°	653
20°	628
25°	595
30°	554
35°	507
40°	454
45°	394
50°	325
55°	244
60°	161
65°	87
70°	45
75°	26
80°	16
85°	7
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	519	36%
0° - 40°	827	57%
0° - 60°	1324	92%
0° - 90°	1443	100%
0° - 180°	1443	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	75.8 fc	6.9 ft
6 ft	19.0 fc	13.7 ft
9 ft	8.4 fc	20.6 ft
12 ft	4.7 fc	27.4 ft

Input Watts: 17W

Lumens: 1443lm

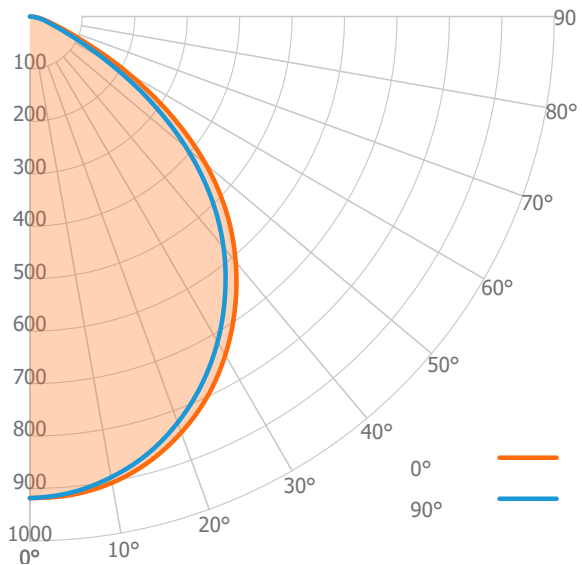
Efficacy: 85lm/W

Beam Angle: 98° x 93°

2000 lm, 3000K, General Ambient **CM10830WFO**

6" Standard Round, White **C6TRSWH**

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (cd)
0°	918
5°	916
10°	903
15°	879
20°	844
25°	800
30°	745
35°	682
40°	611
45°	531
50°	438
55°	330
60°	217
65°	117
70°	61
75°	35
80°	21
85°	10
90°	2

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	698	36%
0° - 40°	1114	57%
0° - 60°	1781	92%
0° - 90°	1940	100%
0° - 180°	1941	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	102.0 fc	6.9 ft
6 ft	25.5 fc	13.7 ft
9 ft	11.3 fc	20.6 ft
12 ft	6.4 fc	27.5 ft

Input Watts: 24.5W

Lumens: 1941lm

Efficacy: 79lm/W

Beam Angle: 98° x 93°