

Project:	Type:
Product Code:	Date:

V103124



3" Surface Mount Cylinder

- Versatile, small diameter surface mount cylinder
- Installs Directly to a surface or recessed mounted junction box, ideal for areas with limited ceiling height & plenum space restrictions
- Wet Listed & IP65 rated

CYLINDER

Mount

Surface

Size

Diameter: 3.5"
Height: 6.5", 9"

Canopy

Standard, Flangeless

Trims

Standard, Snoot, Wall Wash, Decorative

Finish

White, Black, Brushed Aluminum, Bronze, Custom

LIGHT OUTPUT & DISTRIBUTION

Lumens (Power)

Downlight: 750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W), 1500 lm (14.3W)
Adjustable: 750 lm (9.5W), 1000 lm (12.5W)

Color Quality

93 CRI, 2-step SDCM

Color Temperature

- 2700K ● 3000K ● 3500K
- 4000K ● Warm Dim (3000K–1800K)
- Tunable White (4000K–1800K)
- Tunable White (6500K–2700K)

Beam Spread

- 20° Narrow Spot
- 30° Spot
- 40° Flood
- 50° Wide Flood

Lighting Type

- Downlight
- Adjustable

POWER & CONTROLS

Input Voltage

120 / 277V

Dimming

0-10V (120/277V): 1%
TRIAC/ELV (120V): 1%
DALI-2 (120/277V): 0.1%

SPECIALTY LENS

- Hexcell Louver

RATINGS & CERTIFICATIONS

- Wet Location / IP65 Rated Configurations Available
- NSF Listed (White and Black Finish Only)
- DarkSky Approved (Downlight with non-decorative trims only, CCT less than or equal to 3000K)

WARRANTY

5 year limited warranty; 50,000 hours



PRODUCT BUILDER

CYLINDER	XCS	XCS Surface Mount Cylinder			
SHAPE	R	R Round			
SIZE		6 6.5 Inch	9 9 Inch		
CANOPY		S Standard	F Flangeless ¹		
LIGHT OPTIONS		D Downlight ²	A Adjustable ²		
LUMENS DOWN		07 750 lm	10 1000 lm	12 1250 lm ³	15 1500 lm ³
BEAM SPREAD DOWN		NS Narrow Spot (20°)	SP Spot (30°)	FL Flood (40°)	WF Wide Flood (50°) ³
SPECIALTY LENS		0 None ⁴	H Hex Louver ⁵		
CCT		27 2700K ⁶	30 3000K ⁶	35 3500K	40 4000K
		3W Warm Dim ^{4,6}	T1 Tunable White ⁷ (4000K-1800K)	T2 Tunable White ⁷ (6500K-2700K)	
FINISH ⁸		WH White	BK Black	BA Brushed Aluminum	
		BZ Bronze	CC Custom Color		
DIMMING		O 0-10V	T TRIAC/ELV	D DALI-2 ⁹	
EMERGENCY	00	00 None			
TRIM		S Standard	N Snoot ³ (Black Only)	W Wall Wash ³	
		O Decorative: Open ³	Y Decorative: Hyperbolic ³	F Decorative: Float ³	

¹ 3" Round Junction Box Extension required for installation, reference detail on page 5

² Only available in 750 or 1000lm

³ Not available in Adjustable

⁴ Only available in 1000 lm; not available in Narrow Spot beam spread

⁵ Not available with DALI-2, Decorative or Wall Wash trims

⁶ Required for Dark Sky compliance

⁷ Only available in DALI-2 dimming, 1000lm for Downlight, 750lm for Adjustable

⁸ For Marine Grade Select CC

⁹ For Downlight: Only available in 1000 lm with Warm Dim or Tunable White CCT and 1250 lm with Static CCT

For Adjustable: Only available in 1000 lm with Warm Dim or Static CCT and 750lm Tunable White



DOWNLIGHT MODULE PERFORMANCE

Based on 93 CRI, 3000K Downlight Module + Standard White Trim (S) Configuration

(Please refer to IES files for other trim types)

		STATIC CCT				WARM DIM	T1 TUNABLE WHITE	T2 TUNABLE WHITE
LED CHIP		CREE 93 CRI				Bridgelux 93 CRI		
SDCM		2-STEP				3-STEP		
		07	10	12	15	10	10	10
NS	Lumens	843	1099	1221	1418	N/A		
	LPW ¹	93.6	89.4	87.2	98.5			
	CBCP ²	4005	5224	5804	6738			
	UGR ³	13.5	14.4	14.8	15.3			
SP	Lumens	801	1045	1161	1348	857	840	991
	LPW	89	85	82.9	93.6	69.7	68.3	80.6
	CBCP	2730	3560	3956	4593	2520	2053	2422
	UGR	13.9	14.9	15.2	15.7	14.2	16.8	15.9
FL	Lumens	813	1061	1179	1369	870	842	994
	LPW	90.4	86.3	84.2	95	70.7	68.5	80.8
	CBCP	1755	2289	2543	2953	1877	1587	1873
	UGR	13.9	14.8	15.2	15.7	14.2	16	15.2
WF	Lumens	807	1052	1169	1357	863	825	974
	LPW	89.6	85.5	83.5	94.2	70.1	67.1	79.1
	CBCP	1120	1461	1623	1885	1198	1296	1529
	UGR	15.6	16.5	16.9	17.4	15.8	14.9	16.8

CCT MULTIPLIER	STATIC				WARM DIM		T1 TUNABLE WHITE			T2 TUNABLE WHITE		
	2700K	3000K	3500K	4000K	1800K	3000K	1800K	3000K	4000K	2700K	3000K	6500K
	0.93	1	1.05	1.07	0.05	1	0.7	1	1.12	0.96	1	1.07

HEX LOUVER MULTIPLIER	0.6
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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)



ADJUSTABLE MODULE PERFORMANCE

Based on 93 CRI, 3000K Adjustable Module+ Standard White Trim (S) Configuration

(Please refer to IES files for other trim types)

		STATIC CCT		WARM DIM	T1 TUNABLE WHITE	T2 TUNABLE WHITE
LED CHIP		CREE 93 CRI		Bridgelux 93 CRI		
SDCM		2-STEP		3-STEP		
		07	10	10	07	07
NS	Lumens	729	984	N/A		
	LPW ¹	81	78.7			
	CBCP ²	5264	7106			
	UGR ³	14.6	15.6			
SP	Lumens	720	972	915	831	854
	LPW	80	77.8	73.2	69.2	71.1
	CBCP	1876	2532	2385	2164	2224
	UGR	15.5	16.6	16.4	16	16.1
FL	Lumens	739	998	939	853	876
	LPW	82.1	79.8	75.2	71.1	73
	CBCP	1032	1394	1312	1191	1224
	UGR	18.4	19.4	19.2	18.9	19

CCT MULTIPLIER	STATIC				WARM DIM		T1 TUNABLE WHITE			T2 TUNABLE WHITE		
	2700K	3000K	3500K	4000K	1800K	3000K	1800K	3000K	4000K	2700K	3000K	6500K
	0.93	1	1.05	1.07	0.05	1	0.7	1	1.12	0.96	1	1.07

HEX LOUVER MULTIPLIER	0.6
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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)

SUMMARY

	STATIC CCT	WARM DIM	TUNABLE WHITE
CCT	2700K, 3000K, 3500K, 4000K	3000K - 1800K	4000K - 1800K; 6500K - 2700K
LUMENS	750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W), 1500 lm (14.3W)	1000 lm (12.0W)	Downlight: 1000lm (14.3W), Adjustable: 750lm (12.5W)
EFFICACY	79 lm/W, 80 lm/W, 87 lm/W, 105 lm/W	83 lm/W	60lm/W, 70 lm/W
COLOR QUALITY	93 CRI ¹ , 2-step SDCM	93 CRI ¹ , 3-step SDCM	93 CRI ¹ , 3-step SDCM
BEAM SPREAD	Narrow Spot (20°), Spot (30°), Flood (40°), Wide Flood (50°)	Spot (30°), Flood (40°), Wide Flood (50°)	Spot (30°), Flood (40°), Wide Flood (50°)
DIMMING	0-10V (120/277V): 1% TRIAC/ELV (120V): 1% DALI-2 (120/277V): 0.1%	0-10V (120/277V): 1% TRIAC/ELV (120V): 1% DALI-2 (120/277V): 0.1%	DALI-2 (120/277V): 0.1%
LED CHIP	Cree	Bridgelux	Bridgelux
LISTINGS	ENERGY STAR [®] qualified ² , California Title 24 2019 JA8 compliant, UL Listed for Wet Location, UL Certified US-CA, Declare, RoHS compliant, NSF/ANSI 2 listed, suitable for splash-zone ³ , DALI-2 Compliant, Compliant to FCC Title 47 Part 15; Class B, Dark Sky Compliant ⁴		

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 Zone having designated trim finishes

⁴ Dark Sky approved is only applicable to CCT Options less than or equal to 3000K

ADDITIONAL

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

MAX INPUT CURRENT (120V): 0.11 amps

MAX INPUT CURRENT (277V): 0.05 amps

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

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

LIFETIME: 50,000 hours at 70% lumen maintenance

WARRANTY: 5 year limited warranty

CYLINDER: Extruded aluminum

SIZE: 6.5", 9"

FINISH: White, Black, Bronze, Brushed Aluminum, Custom Color

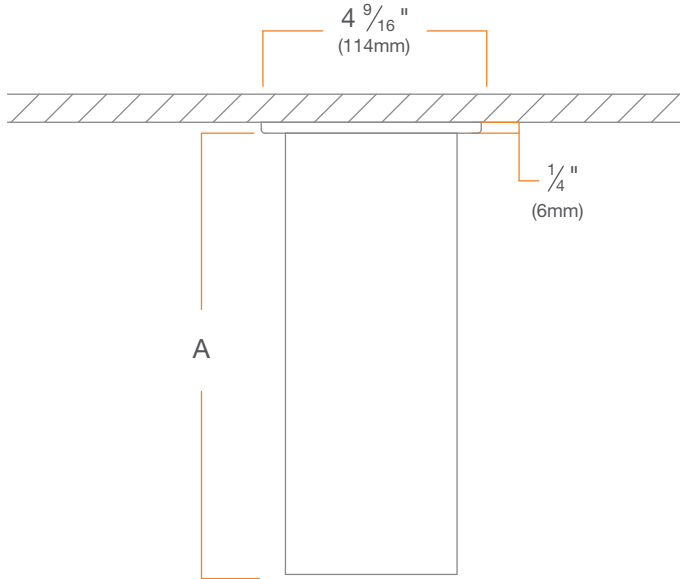
INSTALLATION:

- **STANDARD CANOPY:** Compatible with most 3" octagonal, 4" octagonal, 3" round and 4" round boxes
- **FLANGELESS CANOPY:** Only compatible with 3" round junction box extension

CYLINDER DIMENSION

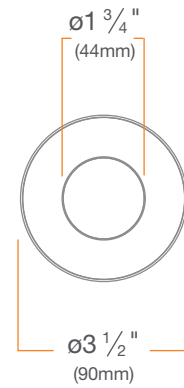
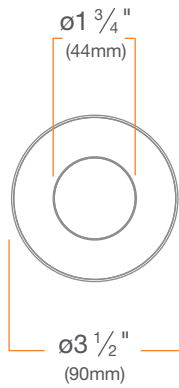
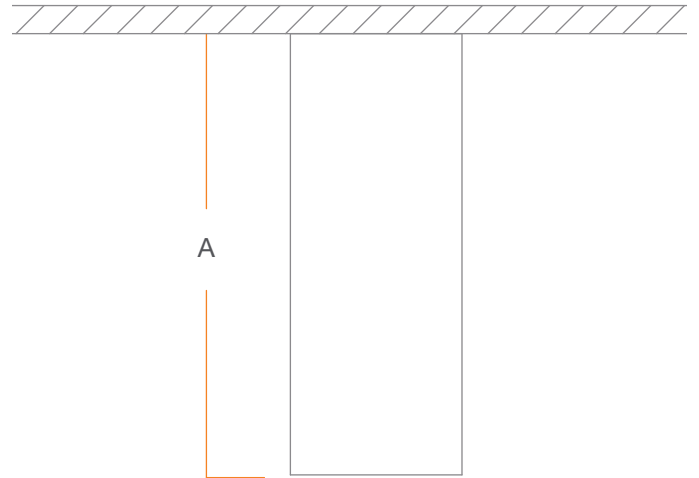
3" Surface Mount, Standard Canopy

XCSR9S



3" Surface Mount, Flangeless Canopy *

XCSR9F



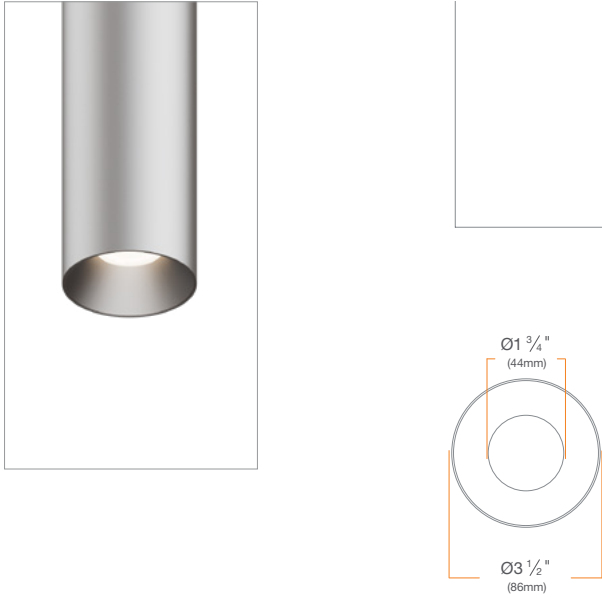
A
 6.5" [165 mm]
 9" [229 mm]

* Only compatible with 3" Round Junction Box Extension

TRIMS + DOWNLIGHT MODULE

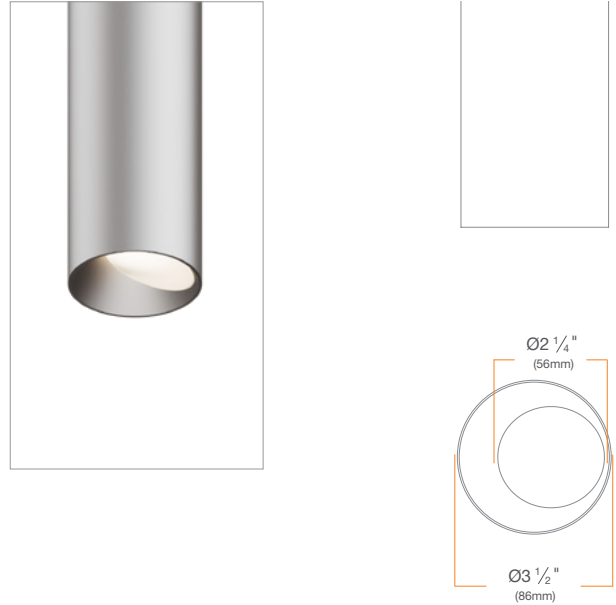
Standard Trim

XCCX-S



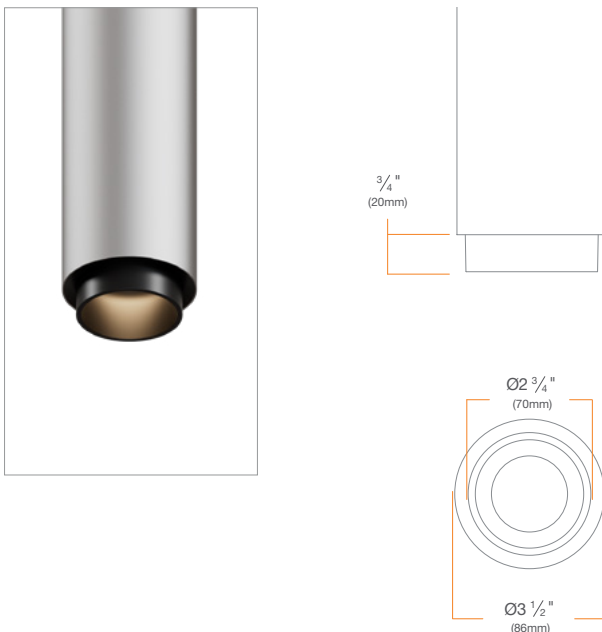
Wall Wash Trim

XCCX-W



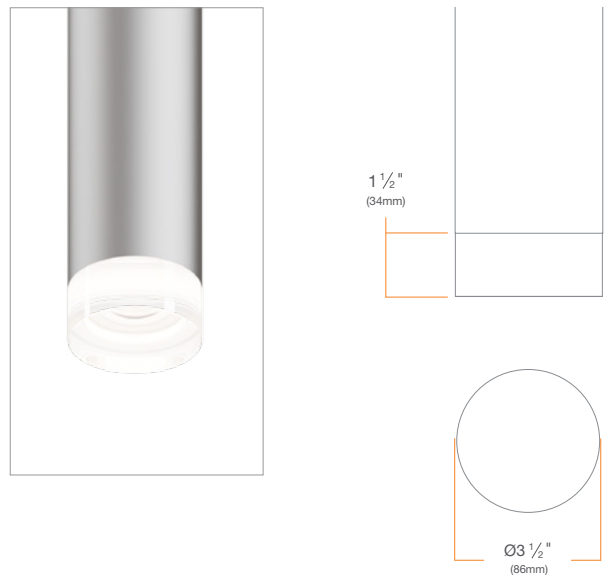
Snoot Trim

XCCX-N



Decorative Float Trim

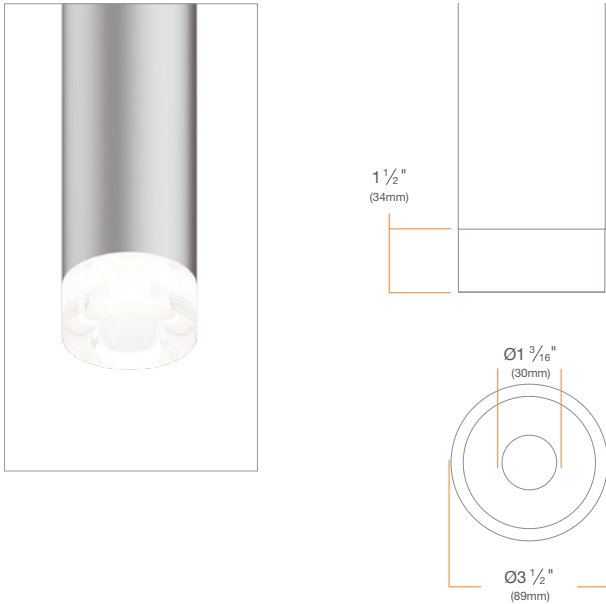
XCCX-F



TRIMS + DOWNLIGHT MODULE

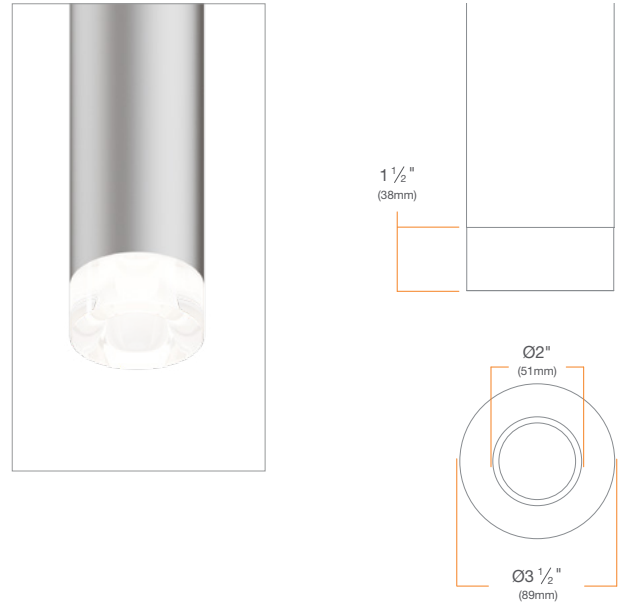
Decorative Hyperbolic Trim

XCCX-Y



Decorative Open Trim

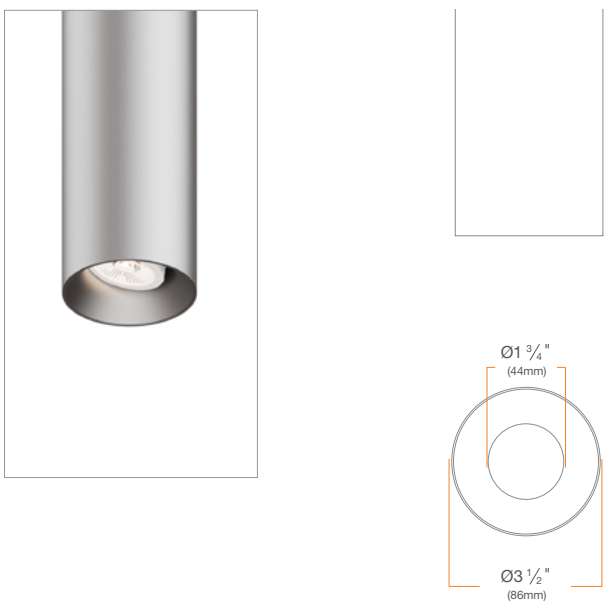
XCCX-O



TRIMS + ADJUSTABLE MODULE

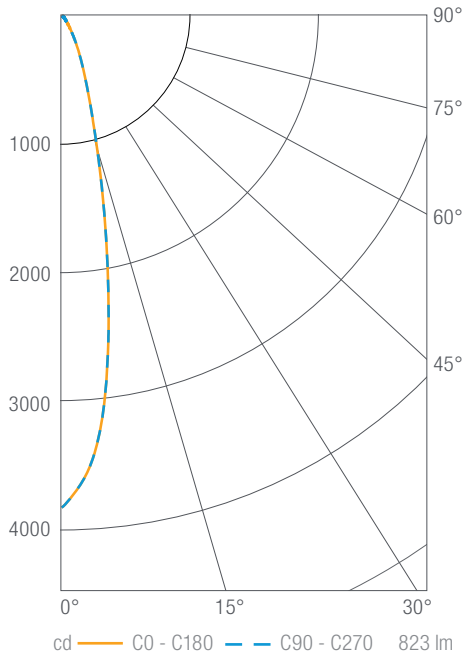
Standard Trim

XCCX-S



PHOTOMETRY

X Series Cylinder 750 lm, 3000K, Narrow Spot



Luminous Intensity

Gamma	C 0°
0°	3916
5°	3377
10°	2127
15°	1092
20°	574
25°	336
30°	186
35°	103
40°	62
45°	42
50°	29
55°	21
60°	17
65°	13
70°	10
75°	7
80°	4
85°	2
90°	0

Values in candela

Zonal Lumen Summary

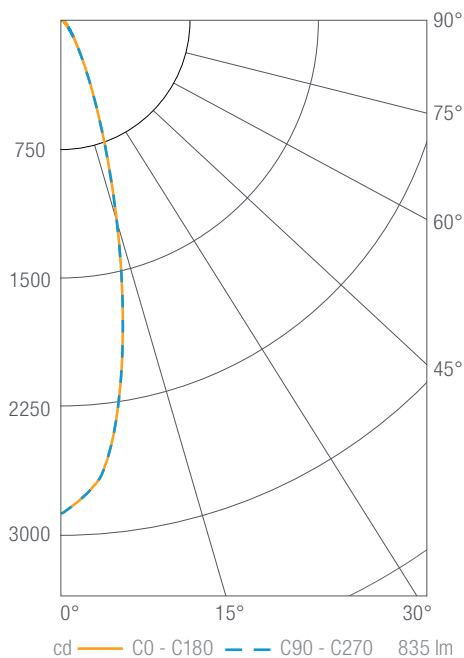
Zone	Lumens	Luminaire %
0-30	704	86
0-40	761	92
0-60	804	98
0-90	823	100
0-180	823	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	435	1.1'
6'	109	2.3'
9'	48	3.4'
12'	27	4.5'

Beam Angle: 21°

X Series Cylinder 750 lm, 3000K, Spot



Luminous Intensity

Gamma	C 0°
0°	2848
5°	2649
10°	2003
15°	1237
20°	675
25°	364
30°	203
35°	119
40°	71
45°	45
50°	31
55°	22
60°	18
65°	14
70°	10
75°	7
80°	5
85°	2
90°	1

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	701	84
0-40	768	92
0-60	815	98
0-90	835	100
0-180	835	100

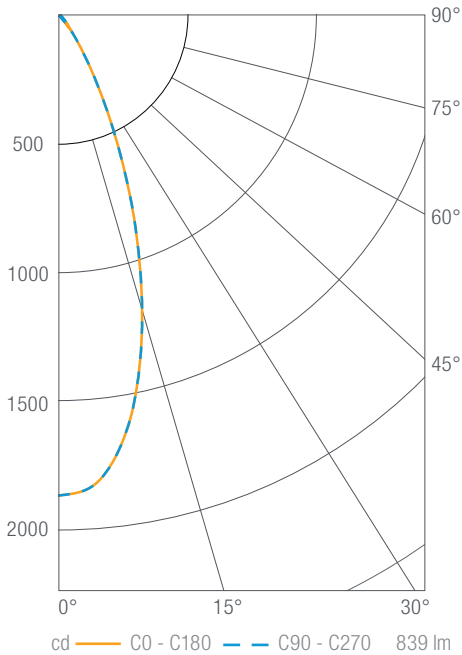
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	317	1.5'
6'	79.1	2.9'
9'	35.2	4.4'
12'	19.8	5.9'

Beam Angle: 28°

PHOTOMETRY

X Series Cylinder 750 lm, 3000K, Flood



Luminous Intensity

Gamma	C 0°
0°	1831
5°	1786
10°	1578
15°	1239
20°	858
25°	516
30°	276
35°	142
40°	77
45°	46
50°	29
55°	19
60°	15
65°	12
70°	9
75°	6
80°	4
85°	2
90°	1

Values in candela

Zonal Lumen Summary

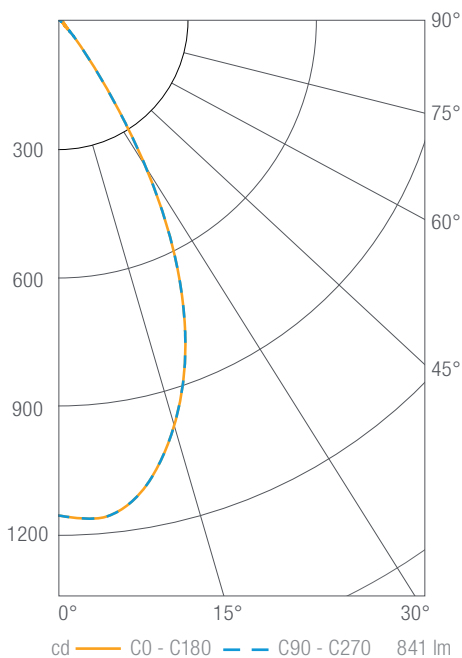
Zone	Lumens	Luminaire %
0-30	688	82
0-40	773	92
0-60	821	98
0-90	839	100
0-180	839	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	204	2.1'
6'	51	4.2'
9'	23	6.3'
12'	13	8.4'

Beam Angle: 39°

X Series Cylinder 750 lm, 3000K, Wide Flood



Luminous Intensity

Gamma	C 0°
0°	1158
5°	1167
10°	1120
15°	1017
20°	872
25°	681
30°	449
35°	221
40°	97
45°	48
50°	28
55°	21
60°	17
65°	14
70°	11
75°	8
80°	5
85°	2
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	645	77
0-40	770	92
0-60	820	98
0-90	841	100
0-180	841	100

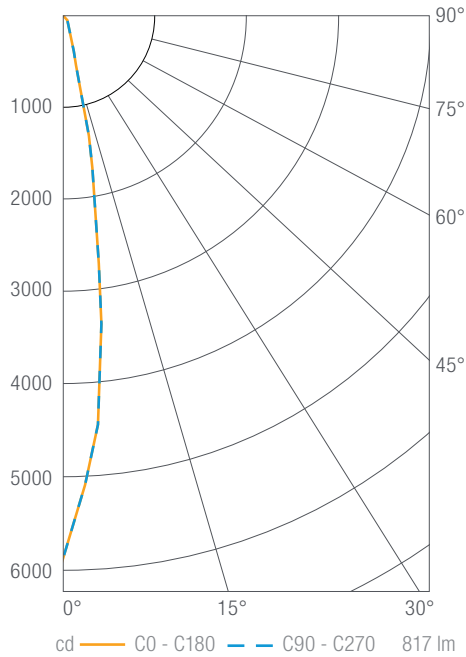
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	129	3.1'
6'	32.2	6.2'
9'	14.3	9.2'
12'	8	12.3'

Beam Angle: 54°

PHOTOMETRY

X Series Cylinder Adjustable, 750 lm, 3000K, Narrow Spot



Luminous Intensity

Gamma	C 0°
0°	5897
5°	4418
10°	1911
15°	561
20°	280
25°	165
30°	117
35°	87
40°	69
45°	57
50°	47
55°	38
60°	31
65°	23
70°	16
75°	10
80°	4
85°	1
90°	0

Values in candela

Zonal Lumen Summary

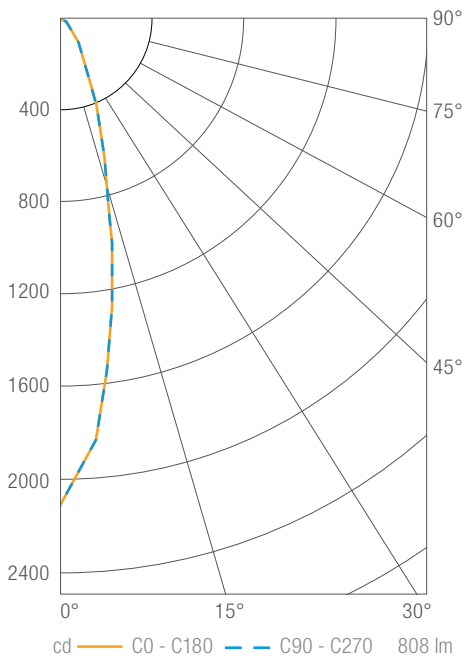
Zone	Lumens	Luminaire %
0-30	645	79
0-40	701	86
0-60	781	96
0-90	817	100
0-180	817	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	655	0.8'
6'	164	1.7'
9'	73	2.5'
12'	41	3.3'

Beam Angle: 16°

X Series Cylinder Adjustable, 750 lm, 3000K, Spot



Luminous Intensity

Gamma	C 0°
0°	2105
5°	1826
10°	1282
15°	800
20°	497
25°	310
30°	201
35°	137
40°	98
45°	73
50°	57
55°	45
60°	35
65°	23
70°	12
75°	5
80°	3
85°	2
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	573	71
0-40	668	83
0-60	773	96
0-90	808	100
0-180	808	100

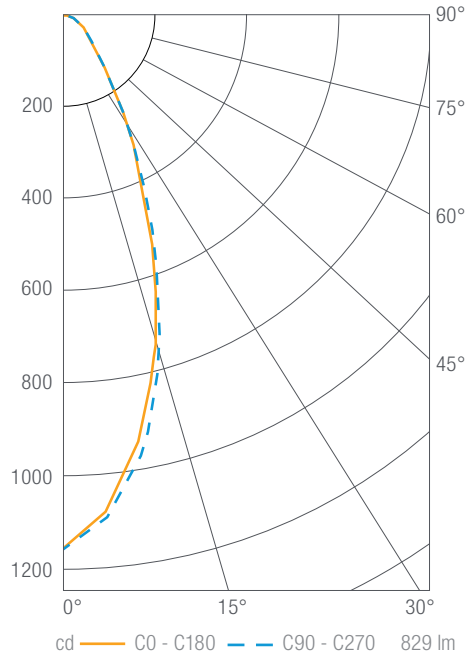
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	234	1.3'
6'	58	2.6'
9'	26	3.9'
12'	15	5.2'

Beam Angle: 28°

PHOTOMETRY

X Series Cylinder Adjustable, 750 lm, 3000K, Flood



Luminous Intensity

Gamma	C 0°
0°	1158
5°	1081
10°	941
15°	765
20°	576
25°	414
30°	288
35°	192
40°	130
45°	96
50°	76
55°	61
60°	49
65°	38
70°	28
75°	18
80°	10
85°	4
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	510	62
0-40	633	76
0-60	766	92
0-90	829	100
0-180	829	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	129	2.2'
6'	32	4.5'
9'	14	6.7'
12'	8	9.0'

Beam Angle: 41°