

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980000

Luminaire Tested: PRLX-242-930-23L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980000
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-930-23L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

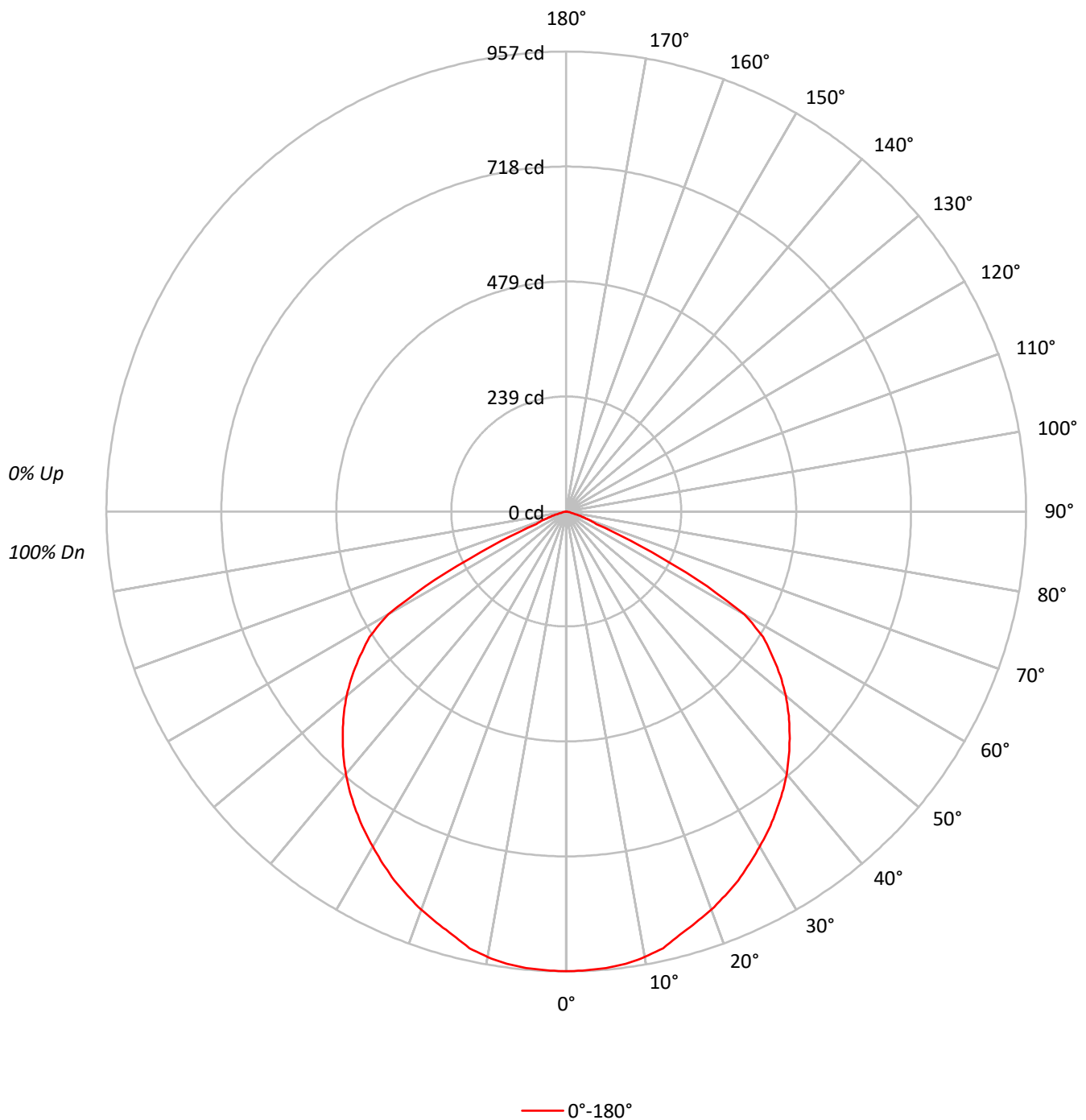
Lumens per Lamp: N/A
Luminaire Lumens: 2397.2 lumens
Efficiency: N/A
Efficacy: 159.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 15
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P980000

CATALOG NUMBER: PRLX-242-930-23L-C-U-S-BLAK-X

Luminous Intensity Polar Plot



TEST NUMBER: P980000

CATALOG NUMBER: PRLX-242-930-23L-C-U-S-BLAK-X

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4281
5°	4284
10°	4278
15°	4226
20°	4200
25°	4182
30°	4161
35°	4161
40°	4168
45°	4162
50°	4154
55°	4084
60°	3825
65°	1784
70°	601
75°	187
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4162 cd/sqm

TEST NUMBER: P980000

CATALOG NUMBER: PRLX-242-930-23L-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	3.8
10°-20°	257.9	10.8
20°-30°	390.2	16.3
30°-40°	477.0	19.9
40°-50°	507.4	21.2
50°-60°	465.7	19.4
60°-70°	191.1	8.0
70°-80°	17.3	0.7
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	738.8	30.8
0°-40°	1215.7	50.7
0°-60°	2188.9	91.3
0°-90°	2397.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2397.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	957	
5°	954	91
15°	912	258
25°	847	390
35°	762	477
45°	658	507
55°	524	466
65°	168	191
75°	11	17
85°	0	0
90°	0	

TEST NUMBER: P980000

CATALOG NUMBER: PRLX-242-930-23L-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	956.6
2.5°	955.9
5°	953.7
7.5°	949.4
10°	941.5
12.5°	930.8
15°	912.1
17.5°	897.1
20°	882.0
22.5°	864.8
25°	846.9
27.5°	826.1
30°	805.3
32.5°	784.5
35°	761.6
37.5°	738.6
40°	713.5
42.5°	686.3
45°	657.6
47.5°	628.2
50°	596.6
52.5°	561.5
55°	523.5
57.5°	485.5
60°	427.4
62.5°	308.4
65°	168.5
67.5°	67.4
70°	45.9
72.5°	31.6
75°	10.8
77.5°	0.7
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

TEST NUMBER: P980000

CATALOG NUMBER: PRLX-242-930-23L-C-U-S-BLAK-X

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.84	19.38	18.21	19.69	20.01	17.84	19.38	18.21	19.69	20.01
	3H	17.83	19.19	18.21	19.52	19.88	17.83	19.19	18.21	19.52	19.88
	4H	17.78	19.05	18.18	19.40	19.78	17.78	19.05	18.18	19.40	19.78
	6H	17.71	18.88	18.13	19.25	19.64	17.71	18.88	18.13	19.25	19.64
	8H	17.68	18.79	18.11	19.18	19.58	17.68	18.79	18.11	19.18	19.58
	12H	17.65	18.71	18.08	19.09	19.52	17.65	18.71	18.08	19.09	19.52
4H	2H	17.90	19.17	18.30	19.52	19.90	17.90	19.17	18.30	19.52	19.90
	3H	17.91	18.95	18.32	19.35	19.75	17.91	18.95	18.32	19.35	19.75
	4H	17.85	18.77	18.29	19.19	19.63	17.85	18.77	18.29	19.19	19.63
	6H	17.79	18.59	18.25	19.03	19.49	17.79	18.59	18.25	19.03	19.49
	8H	17.75	18.49	18.21	18.93	19.40	17.75	18.49	18.21	18.93	19.40
	12H	17.71	18.37	18.19	18.85	19.32	17.71	18.37	18.19	18.85	19.32
8H	4H	17.75	18.49	18.22	18.94	19.41	17.75	18.49	18.22	18.94	19.41
	6H	17.67	18.28	18.17	18.77	19.25	17.67	18.28	18.17	18.77	19.25
	8H	17.61	18.16	18.13	18.67	19.16	17.61	18.16	18.13	18.67	19.16
	12H	17.58	18.06	18.09	18.55	19.12	17.58	18.06	18.09	18.55	19.12
12H	4H	17.72	18.38	18.20	18.86	19.33	17.72	18.38	18.20	18.86	19.33
	6H	17.61	18.16	18.13	18.67	19.16	17.61	18.16	18.13	18.67	19.16
	8H	17.58	18.06	18.09	18.55	19.12	17.58	18.06	18.09	18.55	19.12