

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: P980010

Luminaire Tested: PRLX-242-930-31L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980010
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-242-930-31L-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

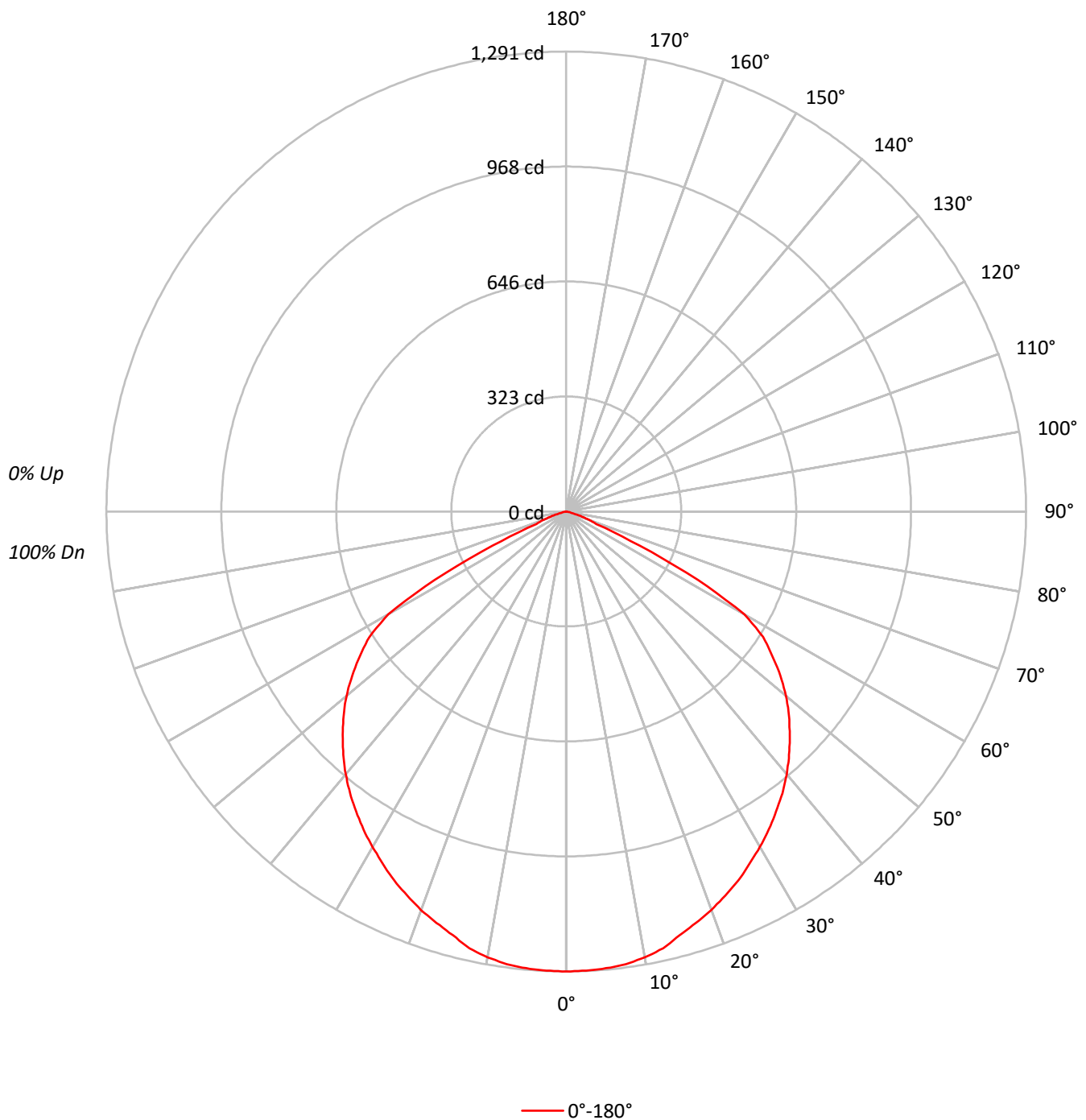
Lumens per Lamp: N/A
Luminaire Lumens: 3235.7 lumens
Efficiency: N/A
Efficacy: 158.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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

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Luminous Intensity Polar Plot



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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°	5778
5°	5783
10°	5775
15°	5704
20°	5670
25°	5644
30°	5617
35°	5616
40°	5626
45°	5617
50°	5607
55°	5513
60°	5163
65°	2409
70°	810
75°	251
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	3.8
10°-20°	348.1	10.8
20°-30°	526.8	16.3
30°-40°	643.8	19.9
40°-50°	684.9	21.2
50°-60°	628.6	19.4
60°-70°	258.0	8.0
70°-80°	23.3	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°	997.2	30.8
0°-40°	1641.0	50.7
0°-60°	2954.5	91.3
0°-90°	3235.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1291	
5°	1287	122
15°	1231	348
25°	1143	527
35°	1028	644
45°	888	685
55°	707	629
65°	228	258
75°	14	23
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1291.2
2.5°	1290.3
5°	1287.3
7.5°	1281.5
10°	1270.9
12.5°	1256.4
15°	1231.2
17.5°	1210.9
20°	1190.6
22.5°	1167.3
25°	1143.1
27.5°	1115.1
30°	1087.0
32.5°	1058.9
35°	1027.9
37.5°	997.0
40°	963.1
42.5°	926.3
45°	887.6
47.5°	847.9
50°	805.3
52.5°	757.9
55°	706.6
57.5°	655.3
60°	576.9
62.5°	416.2
65°	227.5
67.5°	91.0
70°	61.9
72.5°	42.6
75°	14.5
77.5°	1.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

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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	18.88	20.42	19.25	20.74	21.05	18.88	20.42	19.25	20.74	21.05
	3H	18.87	20.23	19.25	20.56	20.92	18.87	20.23	19.25	20.56	20.92
	4H	18.82	20.09	19.22	20.44	20.82	18.82	20.09	19.22	20.44	20.82
	6H	18.76	19.93	19.17	20.29	20.68	18.76	19.93	19.17	20.29	20.68
	8H	18.72	19.83	19.15	20.22	20.62	18.72	19.83	19.15	20.22	20.62
	12H	18.69	19.75	19.12	20.13	20.56	18.69	19.75	19.12	20.13	20.56
4H	2H	18.94	20.21	19.34	20.56	20.94	18.94	20.21	19.34	20.56	20.94
	3H	18.95	19.99	19.36	20.39	20.79	18.95	19.99	19.36	20.39	20.79
	4H	18.89	19.81	19.33	20.23	20.67	18.89	19.81	19.33	20.23	20.67
	6H	18.83	19.63	19.29	20.07	20.53	18.83	19.63	19.29	20.07	20.53
	8H	18.79	19.53	19.25	19.97	20.44	18.79	19.53	19.25	19.97	20.44
	12H	18.75	19.41	19.24	19.89	20.36	18.75	19.41	19.24	19.89	20.36
8H	4H	18.80	19.54	19.26	19.98	20.45	18.80	19.54	19.26	19.98	20.45
	6H	18.71	19.32	19.21	19.81	20.29	18.71	19.32	19.21	19.81	20.29
	8H	18.66	19.20	19.17	19.71	20.20	18.66	19.20	19.17	19.71	20.20
	12H	18.62	19.10	19.13	19.60	20.16	18.62	19.10	19.13	19.60	20.16
12H	4H	18.76	19.42	19.24	19.90	20.37	18.76	19.42	19.24	19.90	20.37
	6H	18.65	19.20	19.17	19.71	20.20	18.65	19.20	19.17	19.71	20.20
	8H	18.62	19.10	19.13	19.60	20.16	18.62	19.10	19.13	19.60	20.16

END OF REPORT