

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979290

Luminaire Tested: PRLX-240-927-LL4-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979290
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-927-LL4-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

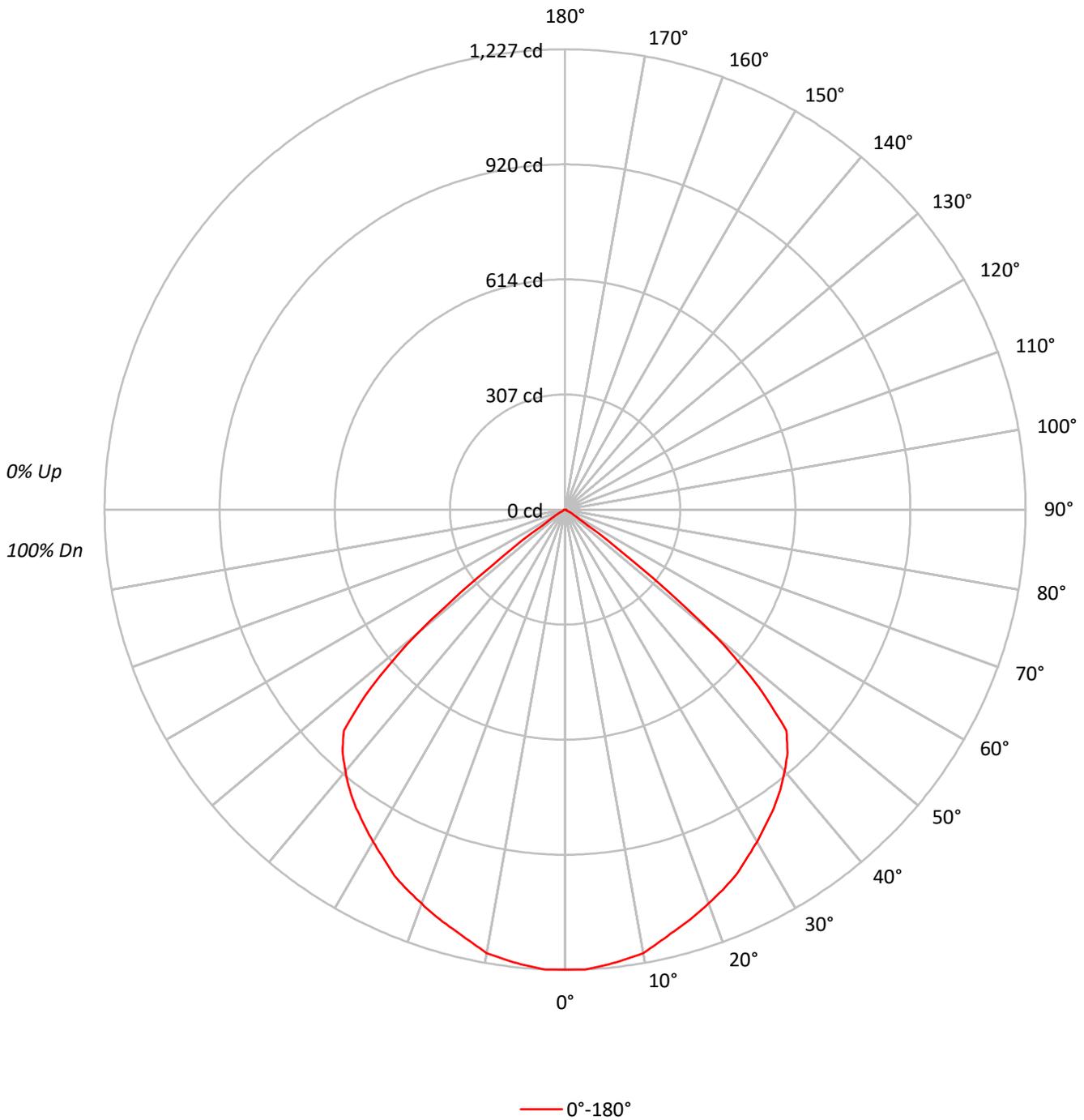
Lumens per Lamp: N/A
Luminaire Lumens: 2290.0 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.39
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99		99	97	96		95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88	86	83	82
3	98	90	84	79	96	89	83	78	86	81	77		83	79	76		81	78	75	73
4	91	82	75	70	89	81	74	69	78	73	69		76	72	68		74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61		70	65	61		68	64	60	58
6	79	68	61	56	78	67	61	55	66	60	55		64	59	55		63	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50		59	54	49		58	53	49	47
8	69	58	50	45	68	57	50	45	56	49	45		55	49	45		54	48	44	43
9	65	53	46	41	64	53	46	41	52	45	41		51	45	41		50	44	41	39
10	61	49	42	38	60	49	42	38	48	42	37		47	41	37		46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12347
5°	12329
10°	12275
15°	12059
20°	11974
25°	11960
30°	11889
35°	11931
40°	11965
45°	11870
50°	8124
55°	1266
60°	312
65°	64
70°	79
75°	105
80°	157
85°	104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11870 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.8	5.1
10°-20°	327.1	14.3
20°-30°	495.4	21.6
30°-40°	607.3	26.5
40°-50°	601.2	26.3
50°-60°	134.1	5.9
60°-70°	4.9	0.2
70°-80°	2.9	0.1
80°-90°	1.3	0.1
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°	938.3	41.0
0°-40°	1545.6	67.5
0°-60°	2280.9	99.6
0°-90°	2290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2290.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1226	
5°	1220	116
15°	1157	327
25°	1076	495
35°	971	607
45°	834	601
55°	72	134
65°	3	5
75°	3	3
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1226.2
2.5°	1227.1
5°	1219.8
7.5°	1210.7
10°	1200.6
12.5°	1177.8
15°	1156.8
17.5°	1138.5
20°	1117.5
22.5°	1097.5
25°	1076.5
27.5°	1048.2
30°	1022.6
32.5°	996.1
35°	970.6
37.5°	942.2
40°	910.3
42.5°	877.4
45°	833.6
47.5°	700.3
50°	518.6
52.5°	242.0
55°	72.1
57.5°	34.7
60°	15.5
62.5°	5.5
65°	2.7
67.5°	2.7
70°	2.7
72.5°	2.7
75°	2.7
77.5°	2.7
80°	2.7
82.5°	1.8
85°	0.9
87.5°	0.9
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	2.55	3.85	2.92	4.17	4.48	2.55	3.85	2.92	4.17	4.48
	3H	2.46	3.60	2.84	3.93	4.29	2.46	3.60	2.84	3.93	4.29
	4H	2.44	3.49	2.84	3.84	4.23	2.44	3.49	2.84	3.84	4.23
	6H	2.46	3.42	2.87	3.79	4.18	2.46	3.42	2.87	3.79	4.18
	8H	2.46	3.37	2.89	3.76	4.17	2.46	3.37	2.89	3.76	4.17
	12H	2.44	3.31	2.88	3.70	4.13	2.44	3.31	2.88	3.70	4.13
4H	2H	2.36	3.41	2.76	3.76	4.14	2.36	3.41	2.76	3.76	4.14
	3H	2.29	3.13	2.70	3.54	3.94	2.29	3.13	2.70	3.54	3.94
	4H	2.28	3.03	2.72	3.45	3.89	2.28	3.03	2.72	3.45	3.89
	6H	2.37	3.01	2.83	3.46	3.93	2.37	3.01	2.83	3.46	3.93
	8H	2.40	3.00	2.87	3.44	3.92	2.40	3.00	2.87	3.44	3.92
	12H	2.39	2.92	2.88	3.41	3.88	2.39	2.92	2.88	3.41	3.88
8H	4H	2.19	2.79	2.66	3.24	3.71	2.19	2.79	2.66	3.24	3.71
	6H	2.33	2.82	2.83	3.32	3.80	2.33	2.82	2.83	3.32	3.80
	8H	2.38	2.83	2.91	3.35	3.84	2.38	2.83	2.91	3.35	3.84
	12H	2.41	2.82	2.93	3.31	3.88	2.41	2.82	2.93	3.31	3.88
12H	4H	2.16	2.69	2.64	3.17	3.65	2.16	2.69	2.64	3.17	3.65
	6H	2.29	2.74	2.82	3.26	3.75	2.29	2.74	2.82	3.26	3.75
	8H	2.38	2.79	2.90	3.28	3.86	2.38	2.79	2.90	3.28	3.86