

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: P979850

Luminaire Tested: PRLX-241-940-LL4-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979850
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-940-LL4-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 241 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

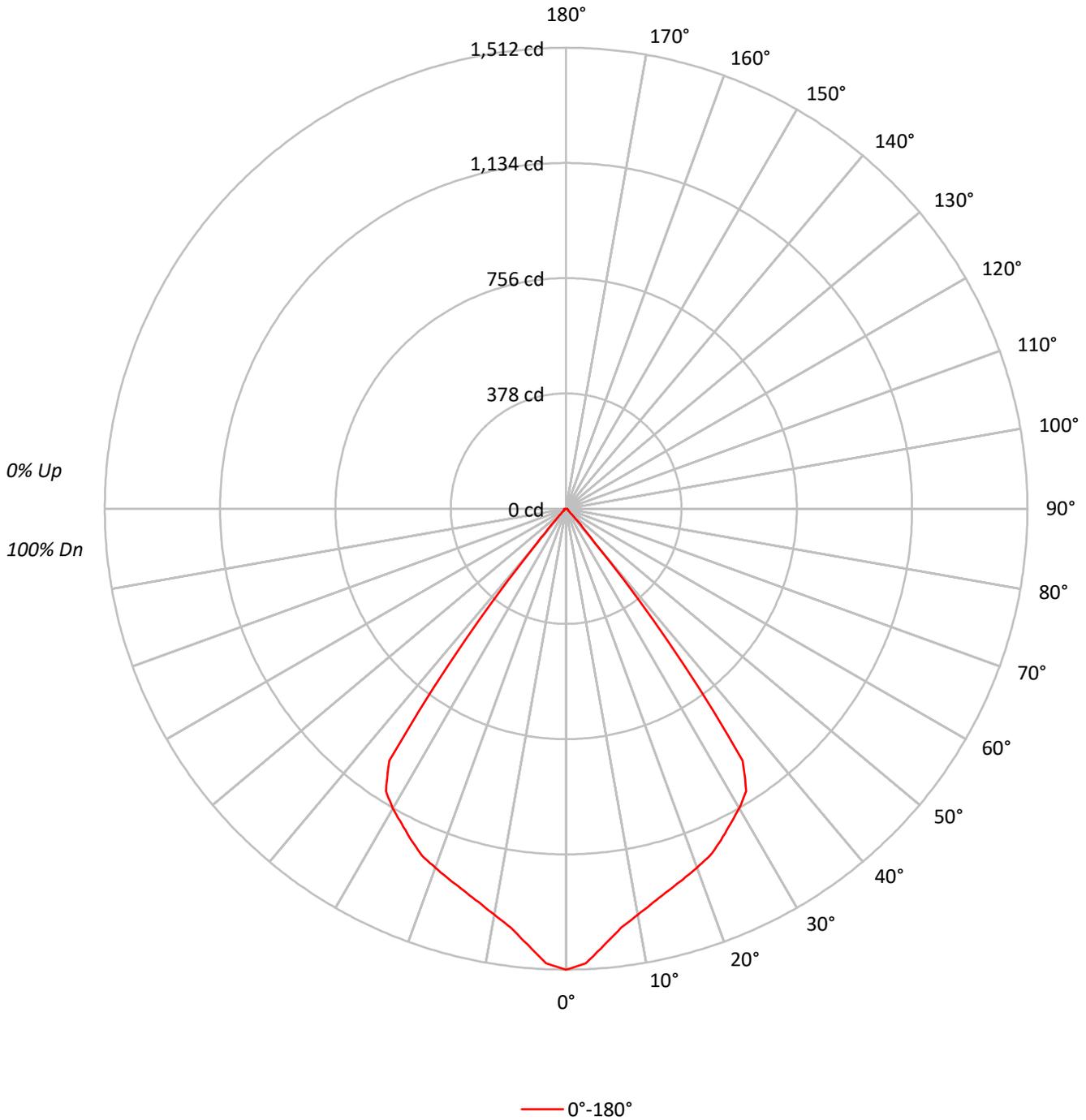
Lumens per Lamp: N/A
Luminaire Lumens: 1607.6 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.05
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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										
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	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						100														
1	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93						93														
2	108	103	98	95	105	101	97	94	98	94	92	95	92	90	92	90	88	86						86														
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80						80														
4	97	89	83	79	95	88	82	78	85	81	77	83	80	76	82	78	76	74						74														
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69						69														
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64						64														
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59						59														
8	78	68	62	57	76	67	61	57	66	61	57	65	60	57	64	60	57	55						55														
9	74	64	58	54	73	63	57	53	62	57	53	61	57	53	61	56	53	51						51														
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48						48														

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	11658
5°	11116
10°	10587
15°	10347
20°	10279
25°	10207
30°	10101
35°	9498
40°	1461
45°	238
50°	112
55°	112
60°	128
65°	133
70°	117
75°	122
80°	93
85°	88

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 238 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	8.4
10°-20°	366.8	22.8
20°-30°	552.8	34.4
30°-40°	504.2	31.4
40°-50°	29.6	1.8
50°-60°	7.6	0.5
60°-70°	6.8	0.4
70°-80°	3.9	0.2
80°-90°	1.4	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°	1054.1	65.6
0°-40°	1558.3	96.9
0°-60°	1595.5	99.2
0°-90°	1607.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1512	
5°	1436	134
15°	1296	367
25°	1200	553
35°	1009	504
45°	22	30
55°	8	8
65°	7	7
75°	4	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1512.2
2.5°	1492.5
5°	1436.5
7.5°	1385.7
10°	1352.5
12.5°	1322.4
15°	1296.5
17.5°	1274.7
20°	1252.9
22.5°	1232.2
25°	1200.0
27.5°	1165.8
30°	1134.7
32.5°	1098.4
35°	1009.2
37.5°	543.5
40°	145.2
42.5°	48.7
45°	21.8
47.5°	11.4
50°	9.3
52.5°	8.3
55°	8.3
57.5°	8.3
60°	8.3
62.5°	7.3
65°	7.3
67.5°	6.2
70°	5.2
72.5°	4.1
75°	4.1
77.5°	3.1
80°	2.1
82.5°	2.1
85°	1.0
87.5°	1.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.17
	12H	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.46
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.31