

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: P979940

Luminaire Tested: PRLX-242-927-LL5-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979940
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-242-927-LL5-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

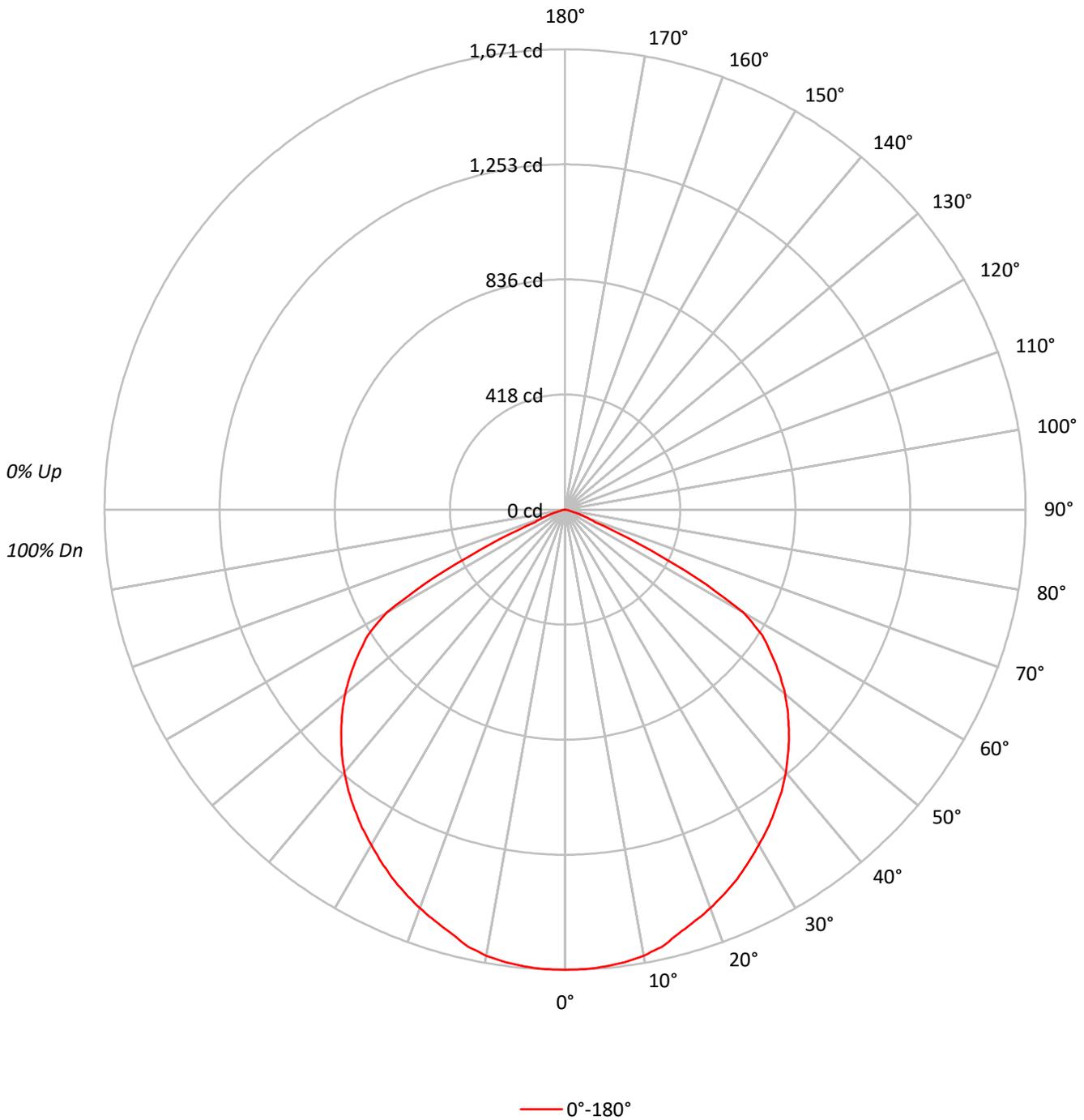
Lumens per Lamp: N/A
Luminaire Lumens: 4186.7 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27				

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7477
5°	7483
10°	7472
15°	7381
20°	7336
25°	7303
30°	7268
35°	7266
40°	7280
45°	7269
50°	7254
55°	7133
60°	6680
65°	3116
70°	1049
75°	325
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7269 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	3.8
10°-20°	450.4	10.8
20°-30°	681.6	16.3
30°-40°	833.0	19.9
40°-50°	886.2	21.2
50°-60°	813.3	19.4
60°-70°	333.8	8.0
70°-80°	30.1	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°	1290.3	30.8
0°-40°	2123.3	50.7
0°-60°	3822.8	91.3
0°-90°	4186.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4186.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1671	
5°	1666	158
15°	1593	450
25°	1479	682
35°	1330	833
45°	1148	886
55°	914	813
65°	294	334
75°	19	30
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1670.7
2.5°	1669.5
5°	1665.7
7.5°	1658.2
10°	1644.4
12.5°	1625.6
15°	1593.1
17.5°	1566.8
20°	1540.5
22.5°	1510.4
25°	1479.1
27.5°	1442.8
30°	1406.5
32.5°	1370.1
35°	1330.1
37.5°	1290.0
40°	1246.1
42.5°	1198.6
45°	1148.5
47.5°	1097.1
50°	1042.0
52.5°	980.6
55°	914.3
57.5°	847.9
60°	746.4
62.5°	538.5
65°	294.3
67.5°	117.7
70°	80.2
72.5°	55.1
75°	18.8
77.5°	1.3
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	19.78	21.32	20.15	21.63	21.95	19.78	21.32	20.15	21.63	21.95
	3H	19.76	21.13	20.14	21.46	21.82	19.76	21.13	20.14	21.46	21.82
	4H	19.71	20.99	20.11	21.33	21.71	19.71	20.99	20.11	21.33	21.71
	6H	19.65	20.82	20.06	21.19	21.58	19.65	20.82	20.06	21.19	21.58
	8H	19.62	20.73	20.04	21.12	21.52	19.62	20.73	20.04	21.12	21.52
	12H	19.58	20.65	20.01	21.03	21.46	19.58	20.65	20.01	21.03	21.46
4H	2H	19.83	21.11	20.23	21.46	21.83	19.83	21.11	20.23	21.46	21.83
	3H	19.85	20.88	20.26	21.28	21.68	19.85	20.88	20.26	21.28	21.68
	4H	19.79	20.71	20.22	21.13	21.57	19.79	20.71	20.22	21.13	21.57
	6H	19.73	20.52	20.19	20.97	21.43	19.73	20.52	20.19	20.97	21.43
	8H	19.68	20.42	20.15	20.87	21.34	19.68	20.42	20.15	20.87	21.34
	12H	19.65	20.31	20.13	20.79	21.26	19.65	20.31	20.13	20.79	21.26
8H	4H	19.69	20.43	20.16	20.88	21.34	19.69	20.43	20.16	20.88	21.34
	6H	19.61	20.21	20.10	20.71	21.18	19.61	20.21	20.10	20.71	21.18
	8H	19.55	20.10	20.07	20.61	21.10	19.55	20.10	20.07	20.61	21.10
	12H	19.51	20.00	20.02	20.49	21.06	19.51	20.00	20.02	20.49	21.06
12H	4H	19.66	20.31	20.14	20.79	21.27	19.66	20.31	20.14	20.79	21.27
	6H	19.55	20.10	20.07	20.61	21.10	19.55	20.10	20.07	20.61	21.10
	8H	19.51	20.00	20.02	20.49	21.06	19.51	20.00	20.02	20.49	21.06