

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: P980012

Luminaire Tested: PRLX-242-930-LL4-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-930-LL4-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

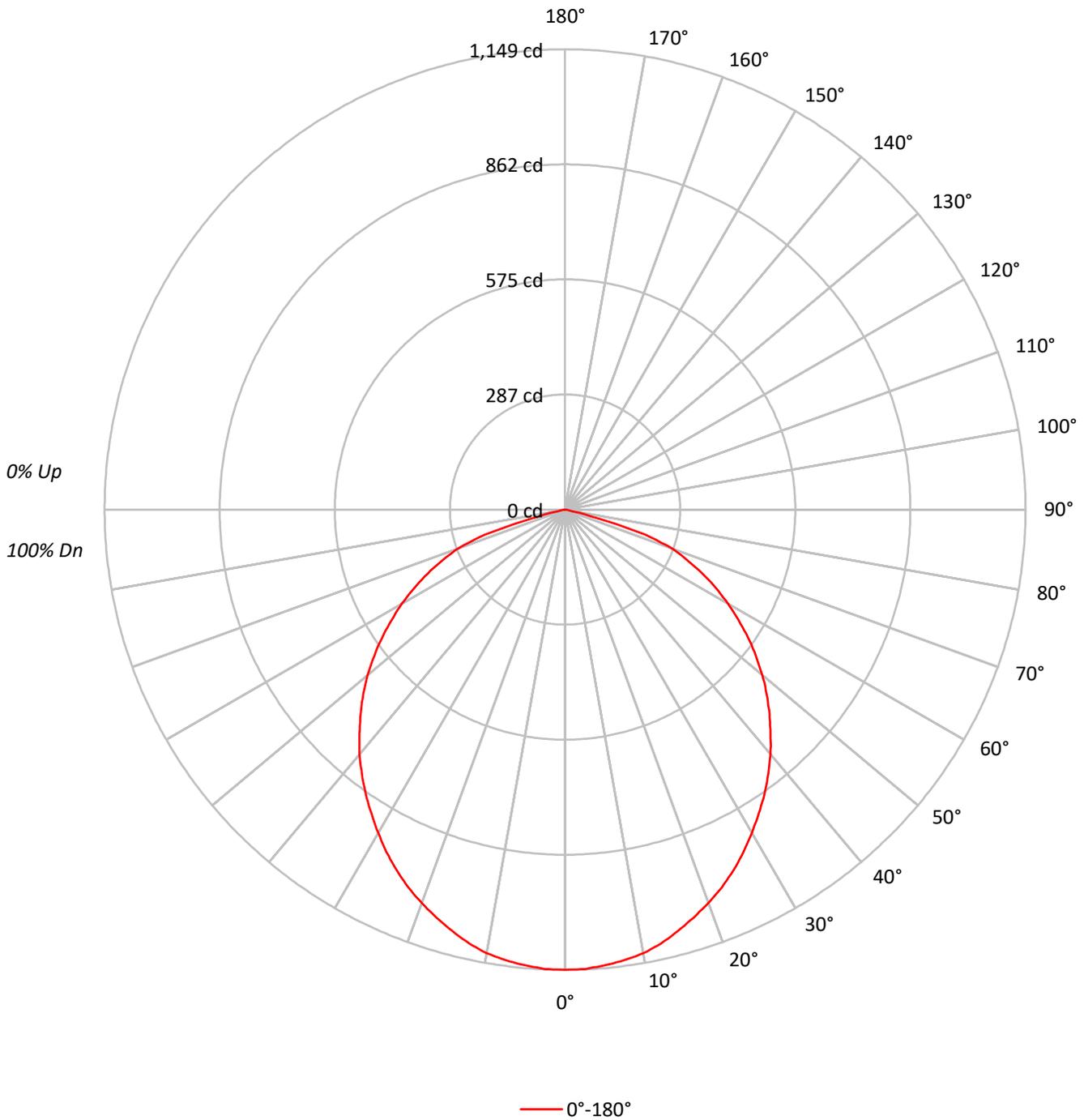
Lumens per Lamp: N/A
Luminaire Lumens: 2958.6 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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	100	100	100	
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73	73	
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62	62	62	62	
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53	53	53	53	
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46	46	46	46	
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40	40	40	40	
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36	36	36	36	
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32	32	32	32	
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29	29	29	29	
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26	26	26	26	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5141
5°	5131
10°	5111
15°	5045
20°	4979
25°	4909
30°	4817
35°	4738
40°	4659
45°	4564
50°	4475
55°	4350
60°	4201
65°	4008
70°	3711
75°	1456
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4564 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	3.7
10°-20°	307.2	10.4
20°-30°	457.6	15.5
30°-40°	542.3	18.3
40°-50°	556.5	18.8
50°-60°	497.9	16.8
60°-70°	373.5	12.6
70°-80°	115.0	3.9
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°	873.3	29.5
0°-40°	1415.6	47.8
0°-60°	2470.0	83.5
0°-90°	2958.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2958.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1149	
5°	1142	108
15°	1089	307
25°	994	458
35°	867	542
45°	721	556
55°	558	498
65°	378	374
75°	84	115
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1148.9
2.5°	1148.0
5°	1142.2
7.5°	1134.4
10°	1124.7
12.5°	1109.2
15°	1088.9
17.5°	1067.6
20°	1045.4
22.5°	1021.2
25°	994.1
27.5°	964.1
30°	932.1
32.5°	899.2
35°	867.3
37.5°	832.4
40°	797.6
42.5°	758.9
45°	721.1
47.5°	682.4
50°	642.7
52.5°	600.1
55°	557.5
57.5°	513.0
60°	469.4
62.5°	424.0
65°	378.5
67.5°	331.0
70°	283.6
72.5°	210.0
75°	84.2
77.5°	3.9
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	17.44	19.03	17.81	19.35	19.66	17.44	19.03	17.81	19.35	19.66
	3H	19.19	20.62	19.57	20.95	21.31	19.19	20.62	19.57	20.95	21.31
	4H	19.39	20.73	19.79	21.08	21.45	19.39	20.73	19.79	21.08	21.45
	6H	19.33	20.57	19.74	20.93	21.32	19.33	20.57	19.74	20.93	21.32
	8H	19.30	20.47	19.72	20.86	21.26	19.30	20.47	19.72	20.86	21.26
	12H	19.27	20.39	19.70	20.78	21.21	19.27	20.39	19.70	20.78	21.21
4H	2H	18.08	19.42	18.48	19.77	20.14	18.08	19.42	18.48	19.77	20.14
	3H	19.99	21.10	20.40	21.50	21.90	19.99	21.10	20.40	21.50	21.90
	4H	20.18	21.17	20.61	21.58	22.02	20.18	21.17	20.61	21.58	22.02
	6H	20.12	20.98	20.58	21.43	21.89	20.12	20.98	20.58	21.43	21.89
	8H	20.09	20.89	20.55	21.33	21.80	20.09	20.89	20.55	21.33	21.80
	12H	20.06	20.77	20.54	21.25	21.72	20.06	20.77	20.54	21.25	21.72
8H	4H	20.21	21.01	20.68	21.46	21.92	20.21	21.01	20.68	21.46	21.92
	6H	20.14	20.80	20.64	21.29	21.77	20.14	20.80	20.64	21.29	21.77
	8H	20.10	20.68	20.61	21.19	21.68	20.10	20.68	20.61	21.19	21.68
	12H	20.08	20.59	20.58	21.08	21.64	20.08	20.59	20.58	21.08	21.64
12H	4H	20.19	20.90	20.67	21.38	21.85	20.19	20.90	20.67	21.38	21.85
	6H	20.10	20.68	20.61	21.19	21.68	20.10	20.68	20.61	21.19	21.68
	8H	20.08	20.59	20.58	21.08	21.64	20.08	20.59	20.58	21.08	21.64