

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: P980221

Luminaire Tested: PRLX-243-927-LL1-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-LL1-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

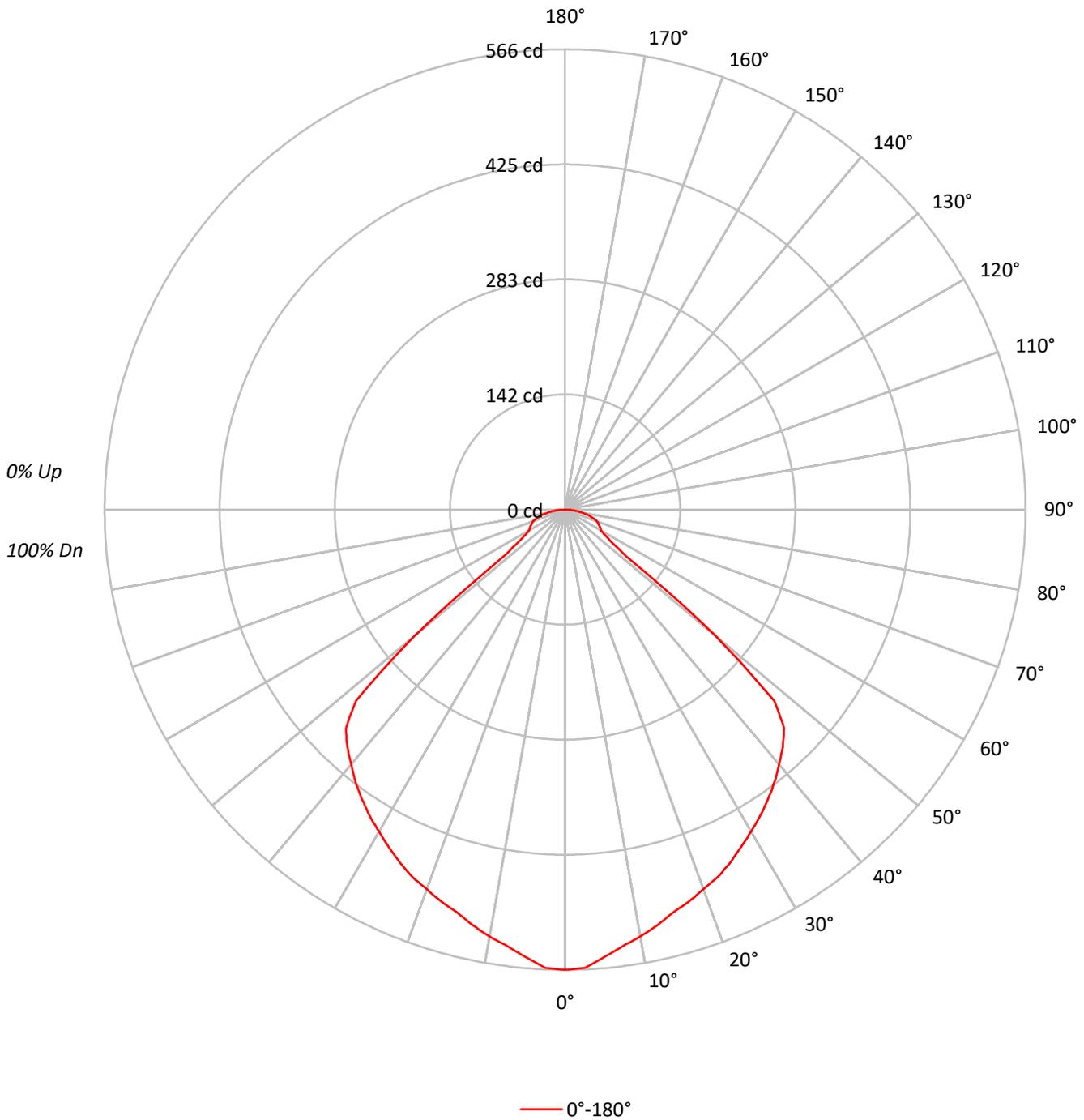
Lumens per Lamp: N/A
Luminaire Lumens: 1142.2 lumens
Efficiency: N/A
Efficacy: 152.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	65	75	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53				53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48				48
7	71	59	51	46	70	58	51	46	57	50	45	56	49	45	54	49	45	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39				39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2792
5°	2736
10°	2671
15°	2620
20°	2608
25°	2610
30°	2605
35°	2619
40°	2634
45°	2657
50°	1846
55°	600
60°	501
65°	543
70°	596
75°	618
80°	591
85°	600

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2657 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	4.6
10°-20°	145.3	12.7
20°-30°	221.0	19.3
30°-40°	272.3	23.8
40°-50°	279.3	24.5
50°-60°	81.2	7.1
60°-70°	45.9	4.0
70°-80°	33.6	2.9
80°-90°	11.6	1.0
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°	418.3	36.6
0°-40°	690.6	60.5
0°-60°	1051.1	92.0
0°-90°	1142.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	566	
5°	552	52
15°	513	145
25°	480	221
35°	435	272
45°	381	279
55°	70	81
65°	46	46
75°	32	34
85°	11	12
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	565.9
2.5°	564.2
5°	552.5
7.5°	541.6
10°	533.1
12.5°	523.6
15°	513.0
17.5°	505.6
20°	496.8
22.5°	489.4
25°	479.5
27.5°	468.3
30°	457.3
32.5°	446.7
35°	434.8
37.5°	422.8
40°	409.0
42.5°	396.0
45°	380.8
47.5°	348.7
50°	240.5
52.5°	94.5
55°	69.8
57.5°	57.5
60°	50.8
62.5°	48.7
65°	46.5
67.5°	44.1
70°	41.3
72.5°	37.4
75°	32.4
77.5°	26.4
80°	20.8
82.5°	15.5
85°	10.6
87.5°	6.0
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	6.09	7.51	6.46	7.82	8.13	6.09	7.51	6.46	7.82	8.13
	3H	8.52	9.77	8.90	10.10	10.46	8.52	9.77	8.90	10.10	10.46
	4H	9.57	10.74	9.97	11.09	11.47	9.57	10.74	9.97	11.09	11.47
	6H	10.35	11.43	10.77	11.80	12.19	10.35	11.43	10.77	11.80	12.19
	8H	10.63	11.66	11.06	12.05	12.45	10.63	11.66	11.06	12.05	12.45
	12H	10.85	11.83	11.28	12.21	12.64	10.85	11.83	11.28	12.21	12.64
4H	2H	6.84	8.01	7.24	8.36	8.74	6.84	8.01	7.24	8.36	8.74
	3H	9.54	10.50	9.95	10.90	11.30	9.54	10.50	9.95	10.90	11.30
	4H	10.73	11.59	11.16	12.00	12.45	10.73	11.59	11.16	12.00	12.45
	6H	11.64	12.38	12.10	12.83	13.29	11.64	12.38	12.10	12.83	13.29
	8H	11.97	12.66	12.43	13.11	13.58	11.97	12.66	12.43	13.11	13.58
	12H	12.23	12.85	12.72	13.33	13.81	12.23	12.85	12.72	13.33	13.81
8H	4H	11.15	11.85	11.61	12.29	12.76	11.15	11.85	11.61	12.29	12.76
	6H	12.20	12.78	12.70	13.27	13.75	12.20	12.78	12.70	13.27	13.75
	8H	12.62	13.15	13.14	13.66	14.15	12.62	13.15	13.14	13.66	14.15
	12H	12.99	13.46	13.51	13.96	14.52	12.99	13.46	13.51	13.96	14.52
12H	4H	11.19	11.82	11.68	12.30	12.77	11.19	11.82	11.68	12.30	12.77
	6H	12.29	12.81	12.80	13.32	13.81	12.29	12.81	12.80	13.32	13.81
	8H	12.78	13.25	13.29	13.74	14.31	12.78	13.25	13.29	13.74	14.31