

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: P980291

Luminaire Tested: PRLX-243-927-LL8-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980291  
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-LL8-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: -

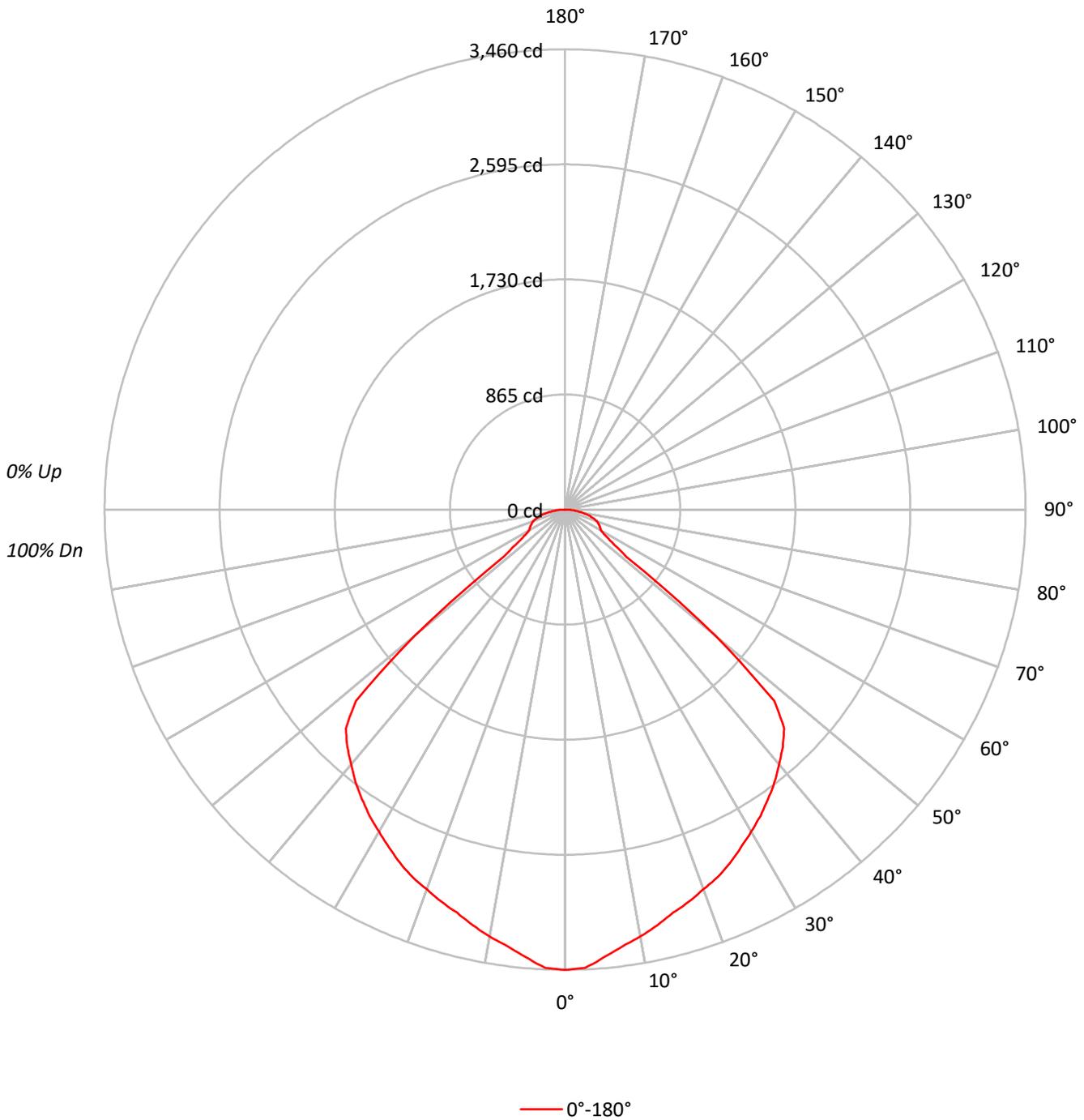
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6983.7 lumens  
Efficiency: N/A  
Efficacy: 113.6 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): 61.5  
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°	17072
5°	16732
10°	16331
15°	16023
20°	15949
25°	15961
30°	15930
35°	16011
40°	16107
45°	16246
50°	11286
55°	3672
60°	3064
65°	3323
70°	3638
75°	3780
80°	3614
85°	3663

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16246 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.7	4.6
10°-20°	888.2	12.7
20°-30°	1351.0	19.3
30°-40°	1664.8	23.8
40°-50°	1707.9	24.5
50°-60°	496.3	7.1
60°-70°	280.8	4.0
70°-80°	205.3	2.9
80°-90°	70.7	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°	2558.0	36.6
0°-40°	4222.7	60.5
0°-60°	6426.9	92.0
0°-90°	6983.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6983.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3460	
5°	3378	319
15°	3137	888
25°	2932	1351
35°	2658	1665
45°	2328	1708
55°	427	496
65°	285	281
75°	198	205
85°	65	71
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3460.3
2.5°	3449.5
5°	3378.3
7.5°	3311.5
10°	3259.7
12.5°	3201.5
15°	3136.9
17.5°	3091.6
20°	3037.7
22.5°	2992.4
25°	2932.0
27.5°	2863.1
30°	2796.2
32.5°	2731.5
35°	2658.2
37.5°	2584.9
40°	2500.9
42.5°	2421.1
45°	2328.4
47.5°	2132.2
50°	1470.3
52.5°	577.8
55°	426.9
57.5°	351.4
60°	310.5
62.5°	297.5
65°	284.6
67.5°	269.5
70°	252.2
72.5°	228.5
75°	198.3
77.5°	161.7
80°	127.2
82.5°	94.9
85°	64.7
87.5°	36.7
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	12.38	13.79	12.75	14.11	14.42	12.38	13.79	12.75	14.11	14.42
	3H	14.80	16.06	15.18	16.39	16.75	14.80	16.06	15.18	16.39	16.75
	4H	15.86	17.03	16.26	17.38	17.76	15.86	17.03	16.26	17.38	17.76
	6H	16.65	17.72	17.06	18.09	18.48	16.65	17.72	17.06	18.09	18.48
	8H	16.92	17.95	17.35	18.34	18.74	16.92	17.95	17.35	18.34	18.74
	12H	17.14	18.12	17.57	18.50	18.93	17.14	18.12	17.57	18.50	18.93
4H	2H	13.13	14.30	13.53	14.65	15.03	13.13	14.30	13.53	14.65	15.03
	3H	15.82	16.78	16.24	17.19	17.59	15.82	16.78	16.24	17.19	17.59
	4H	17.02	17.88	17.45	18.29	18.74	17.02	17.88	17.45	18.29	18.74
	6H	17.93	18.68	18.39	19.12	19.58	17.93	18.68	18.39	19.12	19.58
	8H	18.26	18.96	18.72	19.40	19.87	18.26	18.96	18.72	19.40	19.87
	12H	18.52	19.15	19.01	19.63	20.10	18.52	19.15	19.01	19.63	20.10
8H	4H	17.44	18.14	17.91	18.58	19.05	17.44	18.14	17.91	18.58	19.05
	6H	18.49	19.07	18.99	19.57	20.05	18.49	19.07	18.99	19.57	20.05
	8H	18.92	19.44	19.43	19.95	20.44	18.92	19.44	19.43	19.95	20.44
	12H	19.29	19.75	19.80	20.25	20.82	19.29	19.75	19.80	20.25	20.82
12H	4H	17.49	18.11	17.97	18.59	19.06	17.49	18.11	17.97	18.59	19.06
	6H	18.58	19.10	19.10	19.61	20.10	18.58	19.10	19.10	19.61	20.10
	8H	19.07	19.54	19.58	20.03	20.60	19.07	19.54	19.58	20.03	20.60