

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: P980451

Luminaire Tested: PRLX-243-935-LL8-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980451
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-243-935-LL8-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

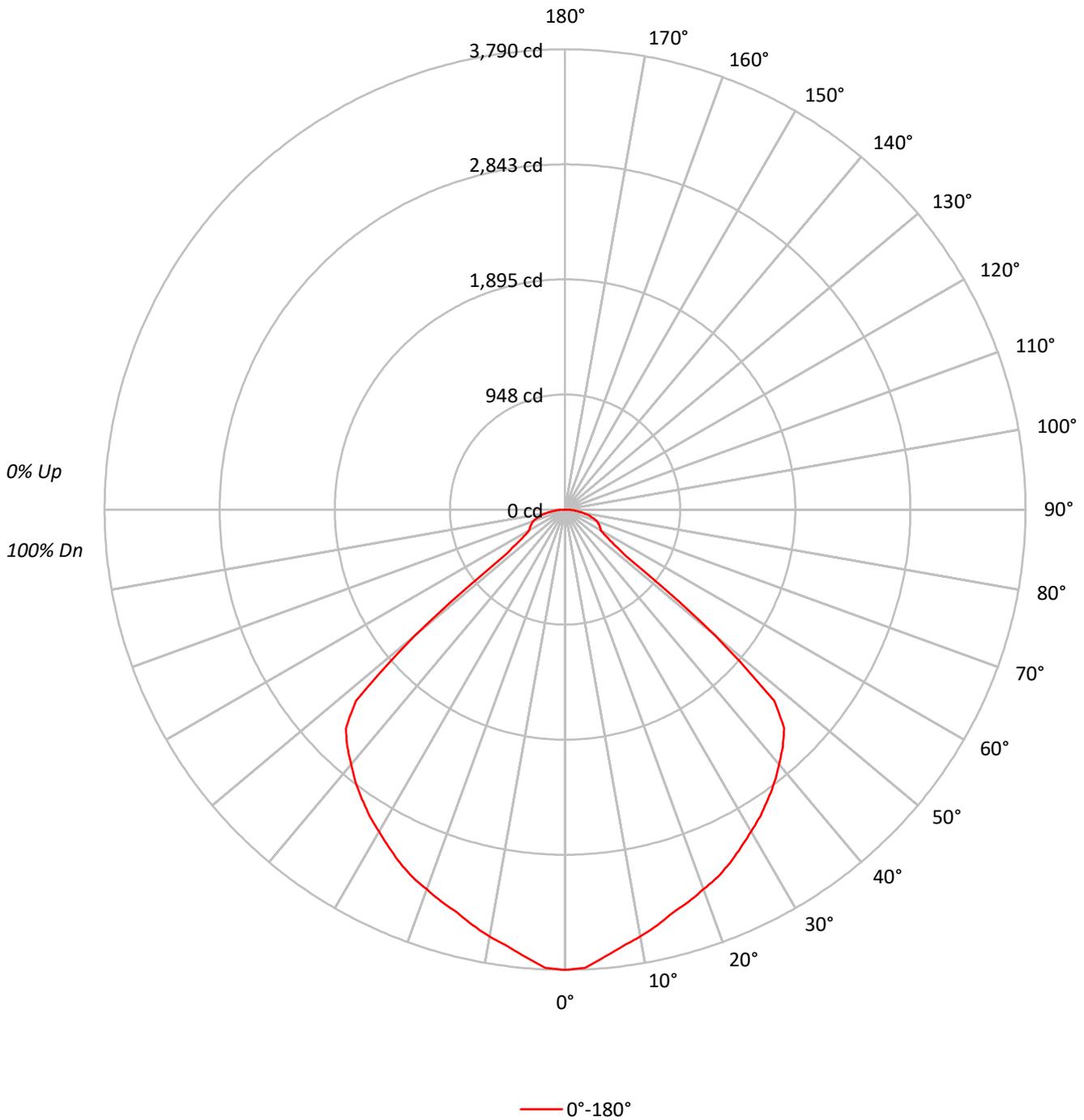
Lumens per Lamp: N/A
Luminaire Lumens: 7648.9 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		77	73	70	68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		50	45	40	39
9	62	50	43	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	18699
5°	18325
10°	17887
15°	17549
20°	17468
25°	17482
30°	17448
35°	17536
40°	17642
45°	17794
50°	12361
55°	4021
60°	3355
65°	3639
70°	3986
75°	4140
80°	3958
85°	4008

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17794 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.1	4.6
10°-20°	972.8	12.7
20°-30°	1479.7	19.3
30°-40°	1823.4	23.8
40°-50°	1870.6	24.5
50°-60°	543.5	7.1
60°-70°	307.6	4.0
70°-80°	224.9	2.9
80°-90°	77.4	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°	2801.6	36.6
0°-40°	4625.0	60.5
0°-60°	7039.1	92.0
0°-90°	7648.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7648.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3790	
5°	3700	349
15°	3436	973
25°	3211	1480
35°	2912	1823
45°	2550	1871
55°	468	544
65°	312	308
75°	217	225
85°	71	77
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3789.9
2.5°	3778.0
5°	3700.1
7.5°	3626.9
10°	3570.3
12.5°	3506.5
15°	3435.7
17.5°	3386.1
20°	3327.0
22.5°	3277.5
25°	3211.3
27.5°	3135.8
30°	3062.6
32.5°	2991.7
35°	2911.5
37.5°	2831.2
40°	2739.1
42.5°	2651.7
45°	2550.2
47.5°	2335.3
50°	1610.4
52.5°	632.8
55°	467.5
57.5°	384.9
60°	340.0
62.5°	325.9
65°	311.7
67.5°	295.2
70°	276.3
72.5°	250.3
75°	217.2
77.5°	177.1
80°	139.3
82.5°	103.9
85°	70.8
87.5°	40.1
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	12.70	14.11	13.06	14.42	14.74	12.70	14.11	13.06	14.42	14.74
	3H	15.12	16.37	15.50	16.70	17.07	15.12	16.37	15.50	16.70	17.07
	4H	16.18	17.35	16.58	17.70	18.08	16.18	17.35	16.58	17.70	18.08
	6H	16.96	18.04	17.38	18.41	18.80	16.96	18.04	17.38	18.41	18.80
	8H	17.24	18.26	17.67	18.65	19.06	17.24	18.26	17.67	18.65	19.06
	12H	17.45	18.43	17.88	18.81	19.24	17.45	18.43	17.88	18.81	19.24
4H	2H	13.45	14.62	13.85	14.97	15.35	13.45	14.62	13.85	14.97	15.35
	3H	16.14	17.10	16.55	17.50	17.91	16.14	17.10	16.55	17.50	17.91
	4H	17.33	18.19	17.77	18.61	19.05	17.33	18.19	17.77	18.61	19.05
	6H	18.25	18.99	18.71	19.44	19.90	18.25	18.99	18.71	19.44	19.90
	8H	18.57	19.27	19.04	19.72	20.19	18.57	19.27	19.04	19.72	20.19
	12H	18.84	19.46	19.32	19.94	20.42	18.84	19.46	19.32	19.94	20.42
8H	4H	17.76	18.45	18.22	18.90	19.37	17.76	18.45	18.22	18.90	19.37
	6H	18.81	19.39	19.31	19.88	20.36	18.81	19.39	19.31	19.88	20.36
	8H	19.23	19.76	19.75	20.27	20.76	19.23	19.76	19.75	20.27	20.76
	12H	19.60	20.07	20.11	20.56	21.13	19.60	20.07	20.11	20.56	21.13
12H	4H	17.80	18.42	18.29	18.90	19.38	17.80	18.42	18.29	18.90	19.38
	6H	18.89	19.42	19.41	19.93	20.42	18.89	19.42	19.41	19.93	20.42
	8H	19.39	19.85	19.90	20.35	20.92	19.39	19.85	19.90	20.35	20.92