

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: P980531

Luminaire Tested: PRLX-243-940-LL8-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980531
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-243-940-LL8-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

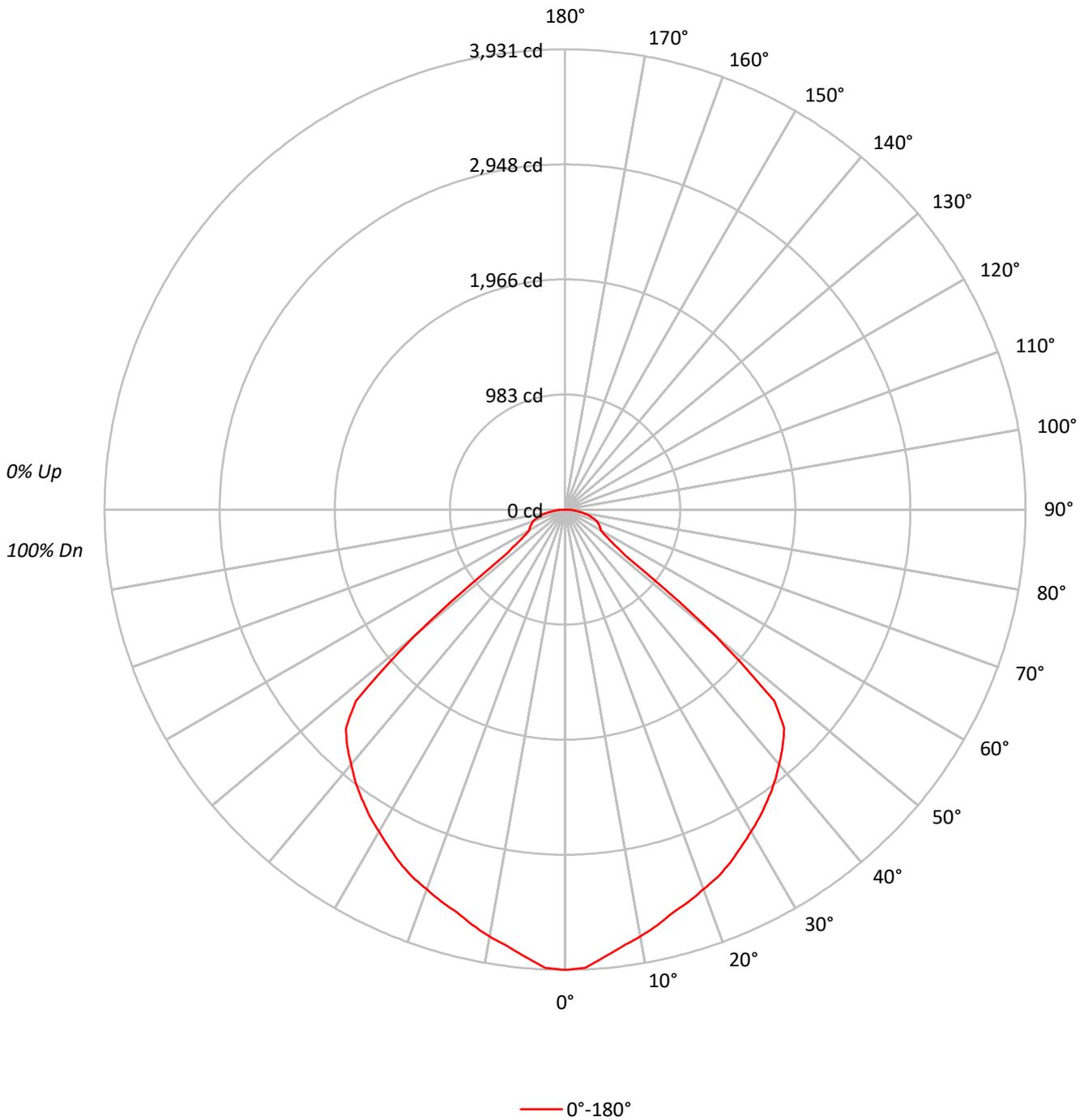
Lumens per Lamp: N/A
Luminaire Lumens: 7933.3 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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°	19393
5°	19007
10°	18552
15°	18201
20°	18118
25°	18132
30°	18096
35°	18188
40°	18297
45°	18455
50°	12820
55°	4171
60°	3480
65°	3774
70°	4133
75°	4295
80°	4106
85°	4161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18455 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.0	4.6
10°-20°	1009.0	12.7
20°-30°	1534.7	19.3
30°-40°	1891.1	23.8
40°-50°	1940.1	24.5
50°-60°	563.7	7.1
60°-70°	319.0	4.0
70°-80°	233.3	2.9
80°-90°	80.3	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°	2905.8	36.6
0°-40°	4796.9	60.5
0°-60°	7300.7	92.0
0°-90°	7933.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7933.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3931	
5°	3838	362
15°	3563	1009
25°	3331	1535
35°	3020	1891
45°	2645	1940
55°	485	564
65°	323	319
75°	225	233
85°	74	80
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3930.7
2.5°	3918.5
5°	3837.7
7.5°	3761.7
10°	3703.0
12.5°	3636.8
15°	3563.4
17.5°	3511.9
20°	3450.7
22.5°	3399.3
25°	3330.7
27.5°	3252.3
30°	3176.4
32.5°	3102.9
35°	3019.7
37.5°	2936.4
40°	2840.9
42.5°	2750.3
45°	2645.0
47.5°	2422.1
50°	1670.2
52.5°	656.3
55°	484.9
57.5°	399.2
60°	352.7
62.5°	338.0
65°	323.3
67.5°	306.1
70°	286.5
72.5°	259.6
75°	225.3
77.5°	183.7
80°	144.5
82.5°	107.8
85°	73.5
87.5°	41.6
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	12.82	14.24	13.19	14.55	14.87	12.82	14.24	13.19	14.55	14.87
	3H	15.25	16.50	15.62	16.83	17.19	15.25	16.50	15.62	16.83	17.19
	4H	16.30	17.47	16.70	17.82	18.21	16.30	17.47	16.70	17.82	18.21
	6H	17.09	18.17	17.50	18.54	18.93	17.09	18.17	17.50	18.54	18.93
	8H	17.37	18.39	17.80	18.78	19.18	17.37	18.39	17.80	18.78	19.18
	12H	17.58	18.56	18.01	18.94	19.37	17.58	18.56	18.01	18.94	19.37
4H	2H	13.57	14.74	13.98	15.09	15.48	13.57	14.74	13.98	15.09	15.48
	3H	16.27	17.23	16.68	17.63	18.03	16.27	17.23	16.68	17.63	18.03
	4H	17.46	18.32	17.89	18.74	19.18	17.46	18.32	17.89	18.74	19.18
	6H	18.37	19.12	18.83	19.56	20.03	18.37	19.12	18.83	19.56	20.03
	8H	18.70	19.40	19.17	19.85	20.31	18.70	19.40	19.17	19.85	20.31
	12H	18.97	19.59	19.45	20.07	20.54	18.97	19.59	19.45	20.07	20.54
8H	4H	17.88	18.58	18.35	19.03	19.50	17.88	18.58	18.35	19.03	19.50
	6H	18.94	19.52	19.44	20.01	20.49	18.94	19.52	19.44	20.01	20.49
	8H	19.36	19.88	19.88	20.40	20.89	19.36	19.88	19.88	20.40	20.89
	12H	19.73	20.20	20.24	20.69	21.26	19.73	20.20	20.24	20.69	21.26
12H	4H	17.93	18.55	18.41	19.03	19.50	17.93	18.55	18.41	19.03	19.50
	6H	19.02	19.54	19.54	20.06	20.55	19.02	19.54	19.54	20.06	20.55
	8H	19.52	19.98	20.03	20.48	21.04	19.52	19.98	20.03	20.48	21.04