

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: P980461

Luminaire Tested: PRLX-243-940-LL1-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980461
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-LL1-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: 1297.5 lumens
Efficiency: N/A
Efficacy: 173.0 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

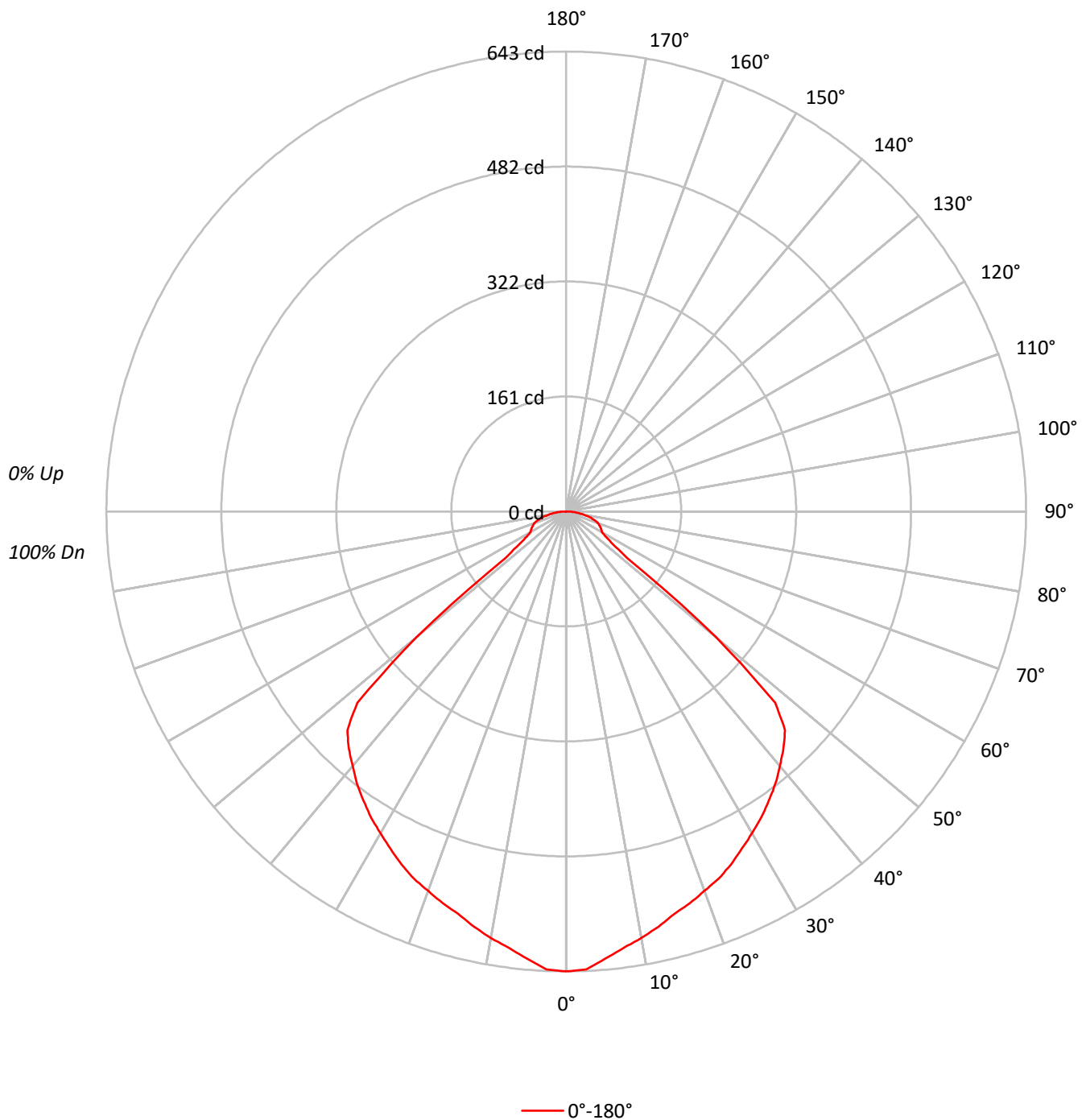
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	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		100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		60
5	82	71	63	57	80	70	63	57	68	61	56		66	60	56		53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		48
7	71	59	51	46	70	58	51	46	57	50	45		56	49	45		43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		39
9	62	50	43	37	61	49	42	37	48	42	37		47	41	37		35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3172
5°	3109
10°	3034
15°	2977
20°	2963
25°	2965
30°	2960
35°	2975
40°	2992
45°	3018
50°	2097
55°	682
60°	569
65°	618
70°	677
75°	703
80°	671
85°	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3018 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	4.6
10°-20°	165.0	12.7
20°-30°	251.0	19.3
30°-40°	309.3	23.8
40°-50°	317.3	24.5
50°-60°	92.2	7.1
60°-70°	52.2	4.0
70°-80°	38.2	2.9
80°-90°	13.1	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°	475.2	36.6
0°-40°	784.5	60.5
0°-60°	1194.0	92.0
0°-90°	1297.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1297.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	643	
5°	628	59
15°	583	165
25°	545	251
35°	494	309
45°	433	317
55°	79	92
65°	53	52
75°	37	38
85°	12	13
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	642.9
2.5°	640.9
5°	627.7
7.5°	615.2
10°	605.6
12.5°	594.8
15°	582.8
17.5°	574.4
20°	564.4
22.5°	556.0
25°	544.7
27.5°	531.9
30°	519.5
32.5°	507.5
35°	493.9
37.5°	480.3
40°	464.6
42.5°	449.8
45°	432.6
47.5°	396.1
50°	273.2
52.5°	107.3
55°	79.3
57.5°	65.3
60°	57.7
62.5°	55.3
65°	52.9
67.5°	50.1
70°	46.9
72.5°	42.5
75°	36.9
77.5°	30.0
80°	23.6
82.5°	17.6
85°	12.0
87.5°	6.8
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	6.53	7.95	6.90	8.26	8.58	6.53	7.95	6.90	8.26	8.58
	3H	8.96	10.21	9.34	10.54	10.91	8.96	10.21	9.34	10.54	10.91
	4H	10.02	11.19	10.42	11.54	11.92	10.02	11.19	10.42	11.54	11.92
	6H	10.80	11.88	11.21	12.25	12.64	10.80	11.88	11.21	12.25	12.64
	8H	11.08	12.10	11.50	12.49	12.89	11.08	12.10	11.50	12.49	12.89
	12H	11.29	12.27	11.72	12.65	13.08	11.29	12.27	11.72	12.65	13.08
4H	2H	7.28	8.46	7.69	8.81	9.19	7.28	8.46	7.69	8.81	9.19
	3H	9.98	10.94	10.39	11.34	11.74	9.98	10.94	10.39	11.34	11.74
	4H	11.17	12.03	11.61	12.45	12.89	11.17	12.03	11.61	12.45	12.89
	6H	12.08	12.83	12.54	13.27	13.74	12.08	12.83	12.54	13.27	13.74
	8H	12.41	13.11	12.88	13.55	14.02	12.41	13.11	12.88	13.55	14.02
	12H	12.68	13.30	13.16	13.78	14.25	12.68	13.30	13.16	13.78	14.25
8H	4H	11.60	12.29	12.06	12.74	13.21	11.60	12.29	12.06	12.74	13.21
	6H	12.65	13.23	13.15	13.72	14.20	12.65	13.23	13.15	13.72	14.20
	8H	13.07	13.59	13.59	14.10	14.59	13.07	13.59	13.59	14.10	14.59
	12H	13.44	13.90	13.95	14.40	14.97	13.44	13.90	13.95	14.40	14.97
12H	4H	11.64	12.26	12.13	12.74	13.22	11.64	12.26	12.13	12.74	13.22
	6H	12.73	13.25	13.25	13.77	14.26	12.73	13.25	13.25	13.77	14.26
	8H	13.22	13.69	13.73	14.18	14.75	13.22	13.69	13.73	14.18	14.75