

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: P980501

Luminaire Tested: PRLX-243-940-LL5-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980501
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-LL5-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

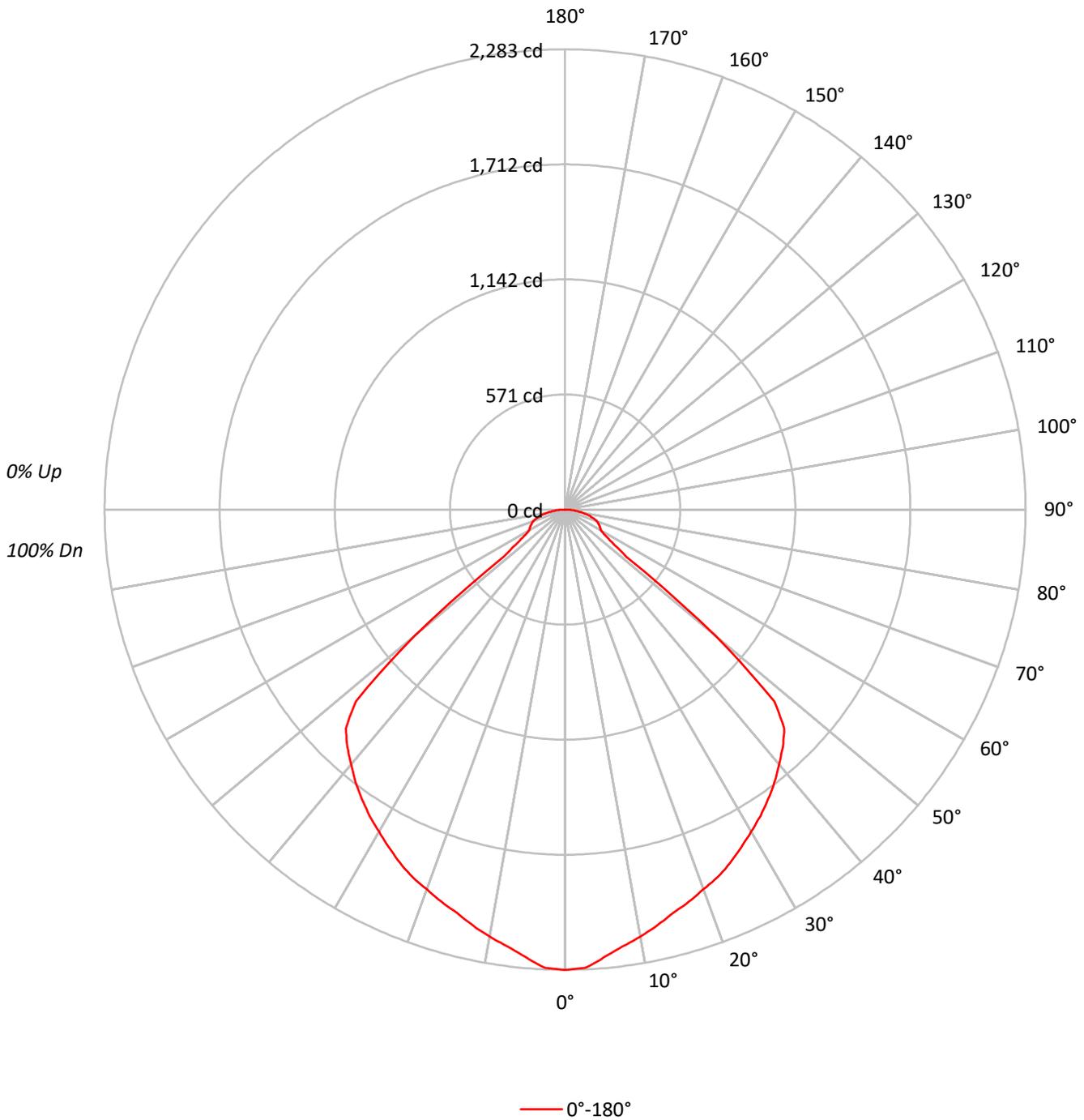
Lumens per Lamp: N/A
Luminaire Lumens: 4608.5 lumens
Efficiency: N/A
Efficacy: 156.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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°	11266
5°	11041
10°	10777
15°	10573
20°	10525
25°	10533
30°	10512
35°	10566
40°	10629
45°	10721
50°	7448
55°	2423
60°	2022
65°	2192
70°	2402
75°	2495
80°	2384
85°	2417

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10721 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.3	4.6
10°-20°	586.1	12.7
20°-30°	891.5	19.3
30°-40°	1098.6	23.8
40°-50°	1127.0	24.5
50°-60°	327.5	7.1
60°-70°	185.3	4.0
70°-80°	135.5	2.9
80°-90°	46.7	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°	1688.0	36.6
0°-40°	2786.6	60.5
0°-60°	4241.1	92.0
0°-90°	4608.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4608.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2283	
5°	2229	210
15°	2070	586
25°	1935	892
35°	1754	1099
45°	1536	1127
55°	282	327
65°	188	185
75°	131	136
85°	43	47
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2283.4
2.5°	2276.3
5°	2229.3
7.5°	2185.2
10°	2151.1
12.5°	2112.7
15°	2070.0
17.5°	2040.1
20°	2004.6
22.5°	1974.7
25°	1934.9
27.5°	1889.3
30°	1845.2
32.5°	1802.5
35°	1754.2
37.5°	1705.8
40°	1650.3
42.5°	1597.7
45°	1536.5
47.5°	1407.0
50°	970.3
52.5°	381.3
55°	281.7
57.5°	231.9
60°	204.9
62.5°	196.3
65°	187.8
67.5°	177.8
70°	166.5
72.5°	150.8
75°	130.9
77.5°	106.7
80°	83.9
82.5°	62.6
85°	42.7
87.5°	24.2
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	10.94	12.35	11.30	12.66	12.98	10.94	12.35	11.30	12.66	12.98
	3H	13.36	14.61	13.74	14.94	15.31	13.36	14.61	13.74	14.94	15.31
	4H	14.42	15.59	14.82	15.94	16.32	14.42	15.59	14.82	15.94	16.32
	6H	15.20	16.28	15.61	16.65	17.04	15.20	16.28	15.61	16.65	17.04
	8H	15.48	16.50	15.91	16.89	17.30	15.48	16.50	15.91	16.89	17.30
	12H	15.69	16.67	16.12	17.05	17.48	15.69	16.67	16.12	17.05	17.48
4H	2H	11.69	12.86	12.09	13.21	13.59	11.69	12.86	12.09	13.21	13.59
	3H	14.38	15.34	14.79	15.74	16.14	14.38	15.34	14.79	15.74	16.14
	4H	15.57	16.43	16.01	16.85	17.29	15.57	16.43	16.01	16.85	17.29
	6H	16.49	17.23	16.95	17.68	18.14	16.49	17.23	16.95	17.68	18.14
	8H	16.81	17.51	17.28	17.96	18.43	16.81	17.51	17.28	17.96	18.43
	12H	17.08	17.70	17.56	18.18	18.66	17.08	17.70	17.56	18.18	18.66
8H	4H	16.00	16.69	16.46	17.14	17.61	16.00	16.69	16.46	17.14	17.61
	6H	17.05	17.63	17.55	18.12	18.60	17.05	17.63	17.55	18.12	18.60
	8H	17.47	18.00	17.99	18.51	19.00	17.47	18.00	17.99	18.51	19.00
	12H	17.84	18.31	18.35	18.80	19.37	17.84	18.31	18.35	18.80	19.37
12H	4H	16.04	16.66	16.53	17.14	17.62	16.04	16.66	16.53	17.14	17.62
	6H	17.13	17.66	17.65	18.17	18.66	17.13	17.66	17.65	18.17	18.66
	8H	17.63	18.09	18.14	18.59	19.16	17.63	18.09	18.14	18.59	19.16