

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: P980503

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-LL5-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

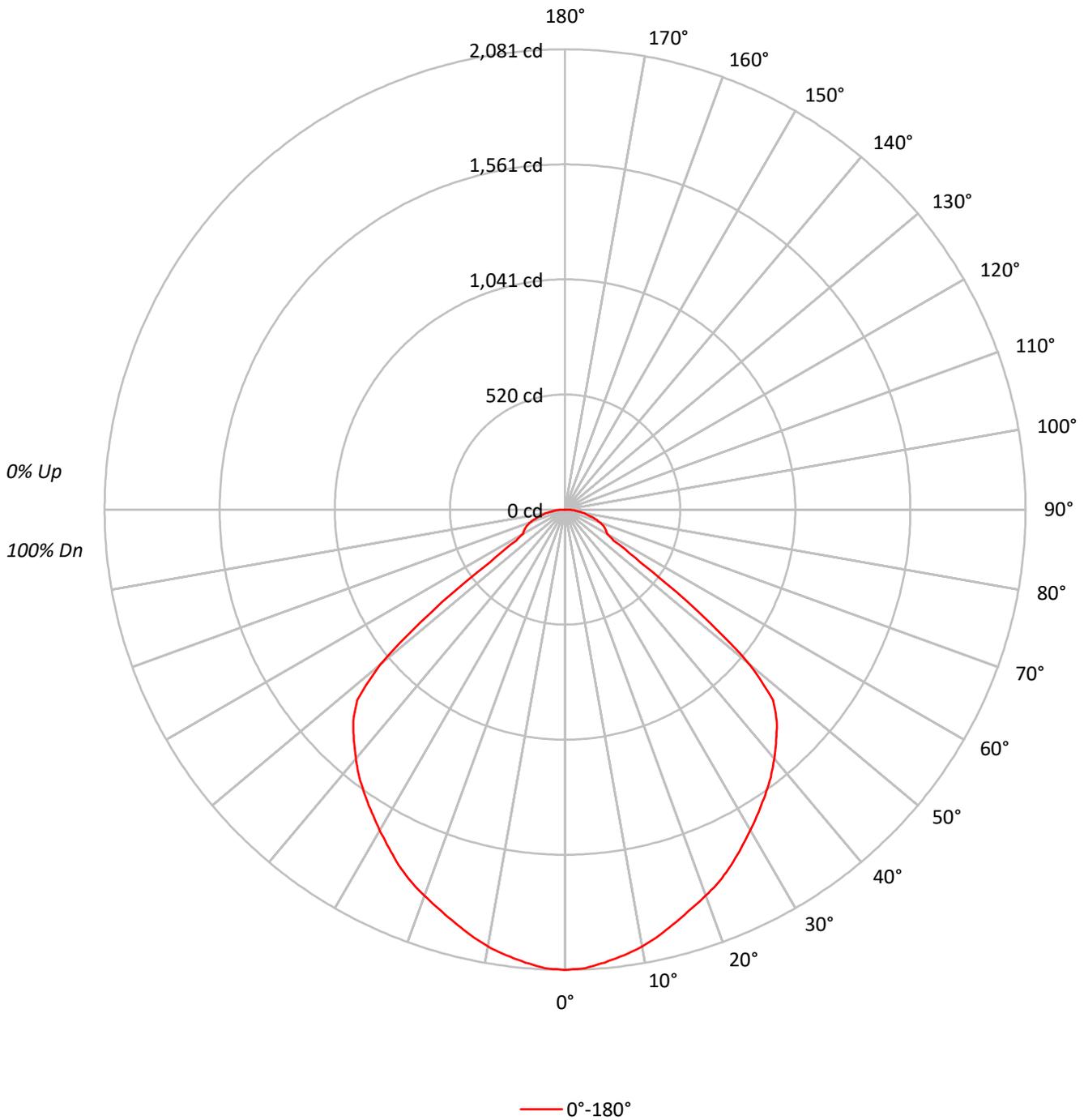
Lumens per Lamp: N/A
Luminaire Lumens: 4399.0 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95		97	95	93		93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49		59	53	49		58	53	48	46
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53	48	43	42
8	66	53	45	40	64	53	45	40	51	45	40		50	44	39		49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45	40	36	34
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	10269
5°	10182
10°	10050
15°	9868
20°	9755
25°	9666
30°	9540
35°	9494
40°	9475
45°	9441
50°	8376
55°	3585
60°	2162
65°	2309
70°	2380
75°	2305
80°	2222
85°	2253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9441 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	4.4
10°-20°	545.6	12.4
20°-30°	817.5	18.6
30°-40°	987.0	22.4
40°-50°	1026.8	23.3
50°-60°	461.9	10.5
60°-70°	193.8	4.4
70°-80°	128.1	2.9
80°-90°	43.5	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°	1557.8	35.4
0°-40°	2544.8	57.9
0°-60°	4033.5	91.7
0°-90°	4399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4399.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2081	
5°	2056	195
15°	1932	546
25°	1776	818
35°	1576	987
45°	1353	1027
55°	417	462
65°	198	194
75°	121	128
85°	40	44
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2081.4
2.5°	2075.7
5°	2055.8
7.5°	2033.0
10°	2006.0
12.5°	1971.8
15°	1932.0
17.5°	1893.6
20°	1858.0
22.5°	1821.0
25°	1775.5
27.5°	1724.3
30°	1674.5
32.5°	1624.7
35°	1576.3
37.5°	1526.5
40°	1471.1
42.5°	1412.7
45°	1353.0
47.5°	1274.7
50°	1091.2
52.5°	762.6
55°	416.8
57.5°	260.4
60°	219.1
62.5°	209.1
65°	197.8
67.5°	183.5
70°	165.0
72.5°	143.7
75°	120.9
77.5°	99.6
80°	78.2
82.5°	58.3
85°	39.8
87.5°	22.8
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	11.84	13.29	12.20	13.60	13.91	11.84	13.29	12.20	13.60	13.91
	3H	13.93	15.21	14.31	15.54	15.91	13.93	15.21	14.31	15.54	15.91
	4H	14.76	15.96	15.16	16.31	16.69	14.76	15.96	15.16	16.31	16.69
	6H	15.40	16.51	15.81	16.88	17.27	15.40	16.51	15.81	16.88	17.27
	8H	15.64	16.69	16.06	17.08	17.48	15.64	16.69	16.06	17.08	17.48
	12H	15.82	16.82	16.25	17.20	17.63	15.82	16.82	16.25	17.20	17.63
4H	2H	12.50	13.70	12.90	14.05	14.43	12.50	13.70	12.90	14.05	14.43
	3H	14.84	15.82	15.25	16.23	16.63	14.84	15.82	15.25	16.23	16.63
	4H	15.80	16.68	16.24	17.10	17.54	15.80	16.68	16.24	17.10	17.54
	6H	16.58	17.35	17.04	17.79	18.26	16.58	17.35	17.04	17.79	18.26
	8H	16.87	17.58	17.34	18.03	18.50	16.87	17.58	17.34	18.03	18.50
	12H	17.10	17.74	17.59	18.22	18.70	17.10	17.74	17.59	18.22	18.70
8H	4H	16.15	16.87	16.62	17.32	17.78	16.15	16.87	16.62	17.32	17.78
	6H	17.08	17.67	17.58	18.16	18.64	17.08	17.67	17.58	18.16	18.64
	8H	17.45	17.99	17.97	18.50	18.99	17.45	17.99	17.97	18.50	18.99
	12H	17.79	18.27	18.30	18.76	19.33	17.79	18.27	18.30	18.76	19.33
12H	4H	16.19	16.83	16.68	17.31	17.78	16.19	16.83	16.68	17.31	17.78
	6H	17.15	17.68	17.66	18.20	18.69	17.15	17.68	17.66	18.20	18.69
	8H	17.59	18.07	18.10	18.57	19.13	17.59	18.07	18.10	18.57	19.13