

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: P980253

Luminaire Tested: PRLX-243-927-LL4-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980253
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-243-927-LL4-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

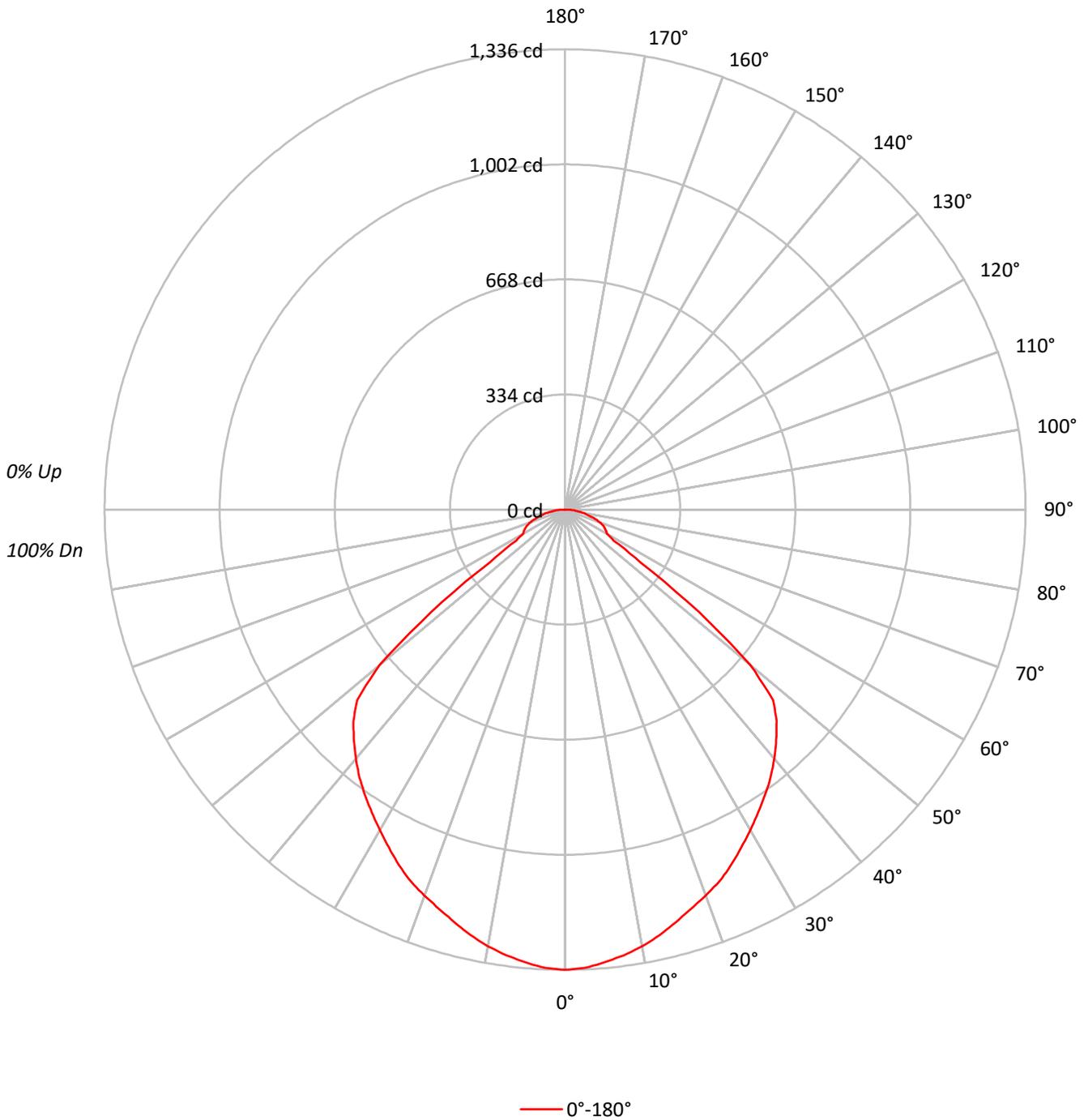
Lumens per Lamp: N/A
Luminaire Lumens: 2823.1 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.35
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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°	6591
5°	6534
10°	6450
15°	6333
20°	6261
25°	6203
30°	6122
35°	6093
40°	6081
45°	6059
50°	5375
55°	2301
60°	1387
65°	1481
70°	1528
75°	1479
80°	1426
85°	1449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6059 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	4.4
10°-20°	350.1	12.4
20°-30°	524.7	18.6
30°-40°	633.4	22.4
40°-50°	658.9	23.3
50°-60°	296.4	10.5
60°-70°	124.4	4.4
70°-80°	82.2	2.9
80°-90°	28.0	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°	999.8	35.4
0°-40°	1633.2	57.9
0°-60°	2588.6	91.7
0°-90°	2823.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2823.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1336	
5°	1319	125
15°	1240	350
25°	1140	525
35°	1012	633
45°	868	659
55°	268	296
65°	127	124
75°	78	82
85°	26	28
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1335.8
2.5°	1332.1
5°	1319.3
7.5°	1304.7
10°	1287.4
12.5°	1265.5
15°	1239.9
17.5°	1215.2
20°	1192.4
22.5°	1168.7
25°	1139.5
27.5°	1106.6
30°	1074.6
32.5°	1042.7
35°	1011.6
37.5°	979.7
40°	944.1
42.5°	906.6
45°	868.3
47.5°	818.1
50°	700.3
52.5°	489.4
55°	267.5
57.5°	167.1
60°	140.6
62.5°	134.2
65°	126.9
67.5°	117.8
70°	105.9
72.5°	92.2
75°	77.6
77.5°	63.9
80°	50.2
82.5°	37.4
85°	25.6
87.5°	14.6
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	10.30	11.74	10.66	12.06	12.37	10.30	11.74	10.66	12.06	12.37
	3H	12.39	13.67	12.77	14.00	14.36	12.39	13.67	12.77	14.00	14.36
	4H	13.21	14.42	13.62	14.77	15.15	13.21	14.42	13.62	14.77	15.15
	6H	13.86	14.97	14.27	15.33	15.73	13.86	14.97	14.27	15.33	15.73
	8H	14.09	15.14	14.52	15.54	15.94	14.09	15.14	14.52	15.54	15.94
	12H	14.28	15.28	14.71	15.66	16.09	14.28	15.28	14.71	15.66	16.09
4H	2H	10.96	12.16	11.36	12.51	12.89	10.96	12.16	11.36	12.51	12.89
	3H	13.30	14.28	13.71	14.68	15.09	13.30	14.28	13.71	14.68	15.09
	4H	14.26	15.14	14.69	15.56	16.00	14.26	15.14	14.69	15.56	16.00
	6H	15.04	15.81	15.50	16.25	16.71	15.04	15.81	15.50	16.25	16.71
	8H	15.33	16.04	15.79	16.49	16.96	15.33	16.04	15.79	16.49	16.96
	12H	15.56	16.20	16.05	16.68	17.15	15.56	16.20	16.05	16.68	17.15
8H	4H	14.61	15.33	15.08	15.77	16.24	14.61	15.33	15.08	15.77	16.24
	6H	15.54	16.13	16.03	16.62	17.10	15.54	16.13	16.03	16.62	17.10
	8H	15.91	16.45	16.43	16.96	17.45	15.91	16.45	16.43	16.96	17.45
	12H	16.25	16.73	16.76	17.22	17.79	16.25	16.73	16.76	17.22	17.79
12H	4H	14.65	15.29	15.13	15.77	16.24	14.65	15.29	15.13	15.77	16.24
	6H	15.61	16.14	16.12	16.66	17.15	15.61	16.14	16.12	16.66	17.15
	8H	16.05	16.53	16.56	17.02	17.59	16.05	16.53	16.56	17.02	17.59