

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: P980243

Luminaire Tested: PRLX-243-927-LL3-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980243
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-LL3-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

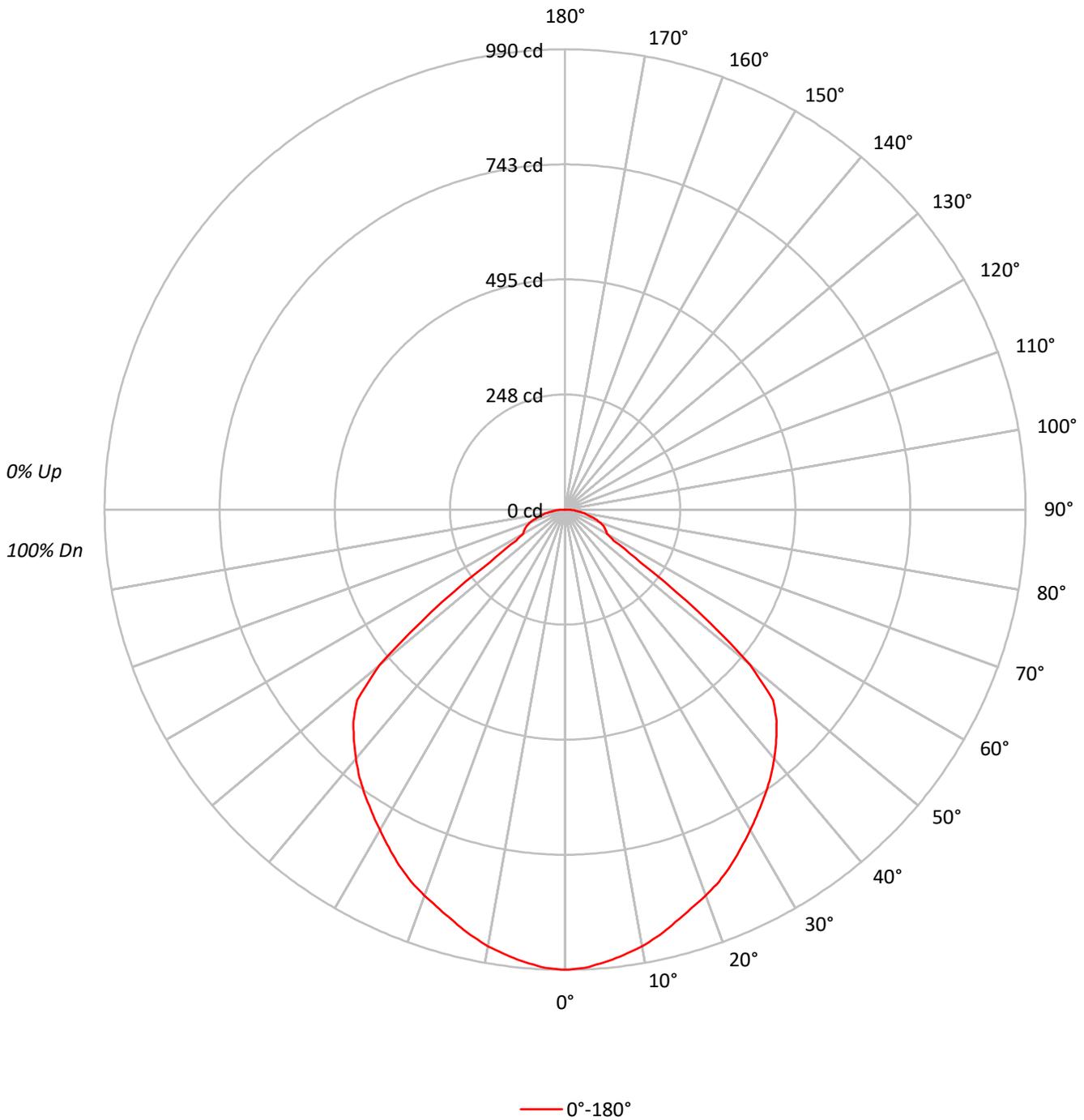
Lumens per Lamp: N/A
Luminaire Lumens: 2091.5 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 15
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									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	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°	4883
5°	4841
10°	4778
15°	4692
20°	4638
25°	4596
30°	4535
35°	4514
40°	4505
45°	4489
50°	3982
55°	1705
60°	1028
65°	1097
70°	1132
75°	1096
80°	1057
85°	1070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	4.4
10°-20°	259.4	12.4
20°-30°	388.7	18.6
30°-40°	469.3	22.4
40°-50°	488.2	23.3
50°-60°	219.6	10.5
60°-70°	92.2	4.4
70°-80°	60.9	2.9
80°-90°	20.7	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°	740.7	35.4
0°-40°	1210.0	57.9
0°-60°	1917.8	91.7
0°-90°	2091.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	990	
5°	977	93
15°	919	259
25°	844	389
35°	750	469
45°	643	488
55°	198	220
65°	94	92
75°	58	61
85°	19	21
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	989.6
2.5°	986.9
5°	977.4
7.5°	966.6
10°	953.8
12.5°	937.5
15°	918.6
17.5°	900.3
20°	883.4
22.5°	865.8
25°	844.2
27.5°	819.8
30°	796.1
32.5°	772.5
35°	749.5
37.5°	725.8
40°	699.4
42.5°	671.7
45°	643.3
47.5°	606.1
50°	518.8
52.5°	362.6
55°	198.2
57.5°	123.8
60°	104.2
62.5°	99.4
65°	94.0
67.5°	87.3
70°	78.5
72.5°	68.3
75°	57.5
77.5°	47.3
80°	37.2
82.5°	27.7
85°	18.9
87.5°	10.8
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	9.25	10.70	9.62	11.02	11.33	9.25	10.70	9.62	11.02	11.33
	3H	11.35	12.63	11.72	12.96	13.32	11.35	12.63	11.72	12.96	13.32
	4H	12.17	13.37	12.57	13.72	14.10	12.17	13.37	12.57	13.72	14.10
	6H	12.82	13.93	13.23	14.29	14.69	12.82	13.93	13.23	14.29	14.69
	8H	13.05	14.10	13.48	14.49	14.90	13.05	14.10	13.48	14.49	14.90
	12H	13.23	14.24	13.66	14.62	15.05	13.23	14.24	13.66	14.62	15.05
4H	2H	9.92	11.12	10.32	11.47	11.85	9.92	11.12	10.32	11.47	11.85
	3H	12.26	13.24	12.67	13.64	14.05	12.26	13.24	12.67	13.64	14.05
	4H	13.22	14.10	13.65	14.52	14.96	13.22	14.10	13.65	14.52	14.96
	6H	14.00	14.76	14.46	15.21	15.67	14.00	14.76	14.46	15.21	15.67
	8H	14.29	15.00	14.75	15.45	15.92	14.29	15.00	14.75	15.45	15.92
	12H	14.52	15.16	15.00	15.64	16.11	14.52	15.16	15.00	15.64	16.11
8H	4H	13.57	14.29	14.04	14.73	15.20	13.57	14.29	14.04	14.73	15.20
	6H	14.49	15.09	14.99	15.58	16.06	14.49	15.09	14.99	15.58	16.06
	8H	14.87	15.41	15.39	15.92	16.41	14.87	15.41	15.39	15.92	16.41
	12H	15.21	15.69	15.72	16.18	16.75	15.21	15.69	15.72	16.18	16.75
12H	4H	13.61	14.25	14.09	14.73	15.20	13.61	14.25	14.09	14.73	15.20
	6H	14.56	15.10	15.08	15.61	16.10	14.56	15.10	15.08	15.61	16.10
	8H	15.01	15.49	15.52	15.98	16.55	15.01	15.49	15.52	15.98	16.55