

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: P980241

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980241
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-243-927-LL3-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

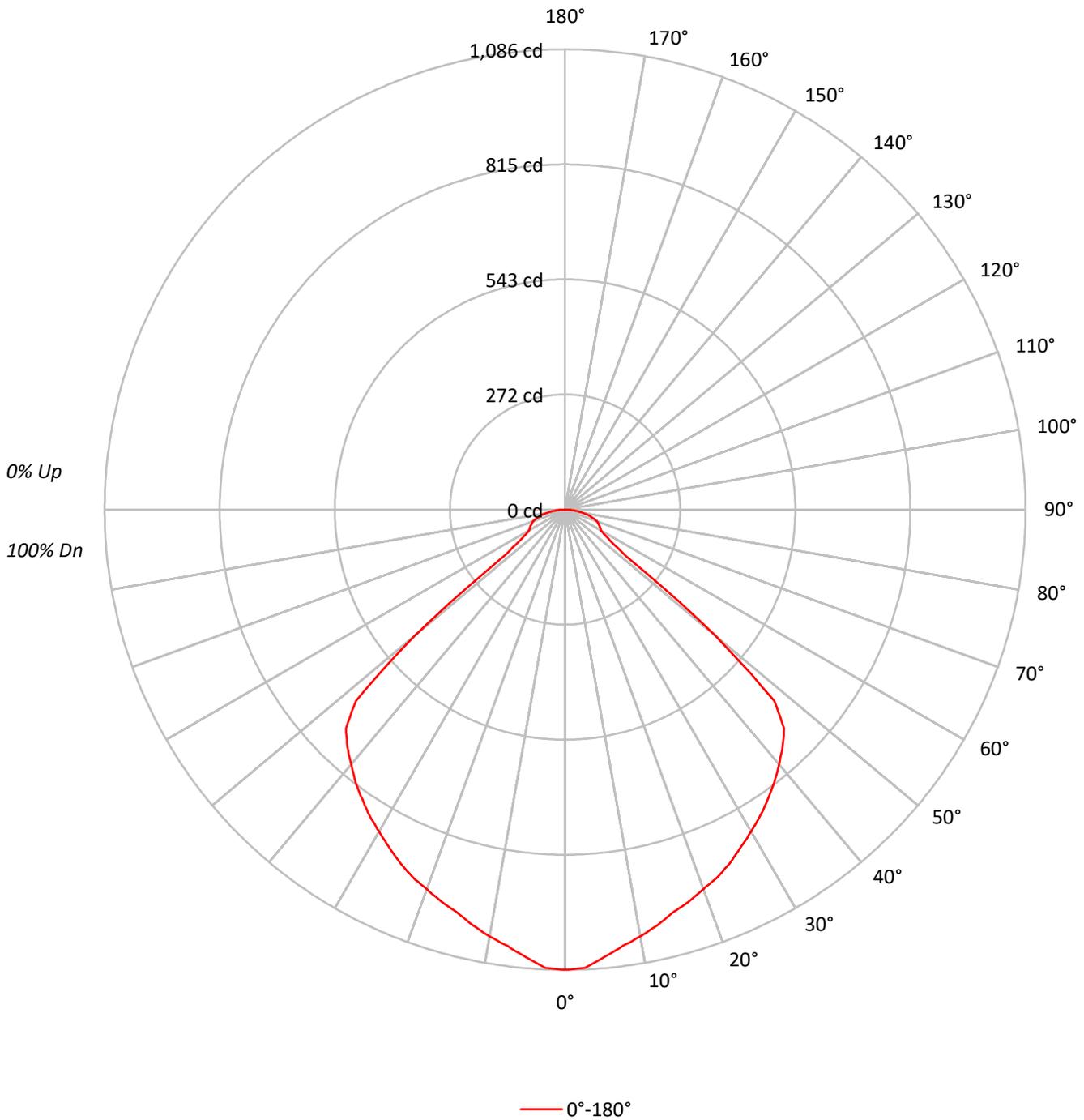
Lumens per Lamp: N/A
Luminaire Lumens: 2191.1 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 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	
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	50	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°	5357
5°	5250
10°	5124
15°	5027
20°	5004
25°	5008
30°	4998
35°	5023
40°	5053
45°	5097
50°	3541
55°	1152
60°	961
65°	1043
70°	1141
75°	1186
80°	1134
85°	1149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5097 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	4.6
10°-20°	278.7	12.7
20°-30°	423.9	19.3
30°-40°	522.3	23.8
40°-50°	535.8	24.5
50°-60°	155.7	7.1
60°-70°	88.1	4.0
70°-80°	64.4	2.9
80°-90°	22.2	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°	802.6	36.6
0°-40°	1324.9	60.5
0°-60°	2016.4	92.0
0°-90°	2191.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1086	
5°	1060	100
15°	984	279
25°	920	424
35°	834	522
45°	730	536
55°	134	156
65°	89	88
75°	62	64
85°	20	22
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1085.7
2.5°	1082.3
5°	1060.0
7.5°	1039.0
10°	1022.7
12.5°	1004.5
15°	984.2
17.5°	970.0
20°	953.1
22.5°	938.9
25°	919.9
27.5°	898.3
30°	877.3
32.5°	857.0
35°	834.0
37.5°	811.0
40°	784.6
42.5°	759.6
45°	730.5
47.5°	669.0
50°	461.3
52.5°	181.3
55°	133.9
57.5°	110.3
60°	97.4
62.5°	93.3
65°	89.3
67.5°	84.6
70°	79.1
72.5°	71.7
75°	62.2
77.5°	50.7
80°	39.9
82.5°	29.8
85°	20.3
87.5°	11.5
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	8.36	9.77	8.72	10.08	10.40	8.36	9.77	8.72	10.08	10.40
	3H	10.78	12.03	11.16	12.36	12.73	10.78	12.03	11.16	12.36	12.73
	4H	11.83	13.01	12.24	13.36	13.74	11.83	13.01	12.24	13.36	13.74
	6H	12.62	13.70	13.03	14.06	14.46	12.62	13.70	13.03	14.06	14.46
	8H	12.90	13.92	13.33	14.31	14.71	12.90	13.92	13.33	14.31	14.71
	12H	13.11	14.09	13.54	14.47	14.90	13.11	14.09	13.54	14.47	14.90
4H	2H	9.11	10.28	9.51	10.63	11.01	9.11	10.28	9.51	10.63	11.01
	3H	11.80	12.76	12.21	13.16	13.56	11.80	12.76	12.21	13.16	13.56
	4H	12.99	13.85	13.42	14.27	14.71	12.99	13.85	13.42	14.27	14.71
	6H	13.90	14.65	14.36	15.09	15.56	13.90	14.65	14.36	15.09	15.56
	8H	14.23	14.93	14.70	15.37	15.84	14.23	14.93	14.70	15.37	15.84
	12H	14.50	15.12	14.98	15.60	16.07	14.50	15.12	14.98	15.60	16.07
8H	4H	13.41	14.11	13.88	14.56	15.02	13.41	14.11	13.88	14.56	15.02
	6H	14.47	15.04	14.97	15.54	16.02	14.47	15.04	14.97	15.54	16.02
	8H	14.89	15.41	15.41	15.92	16.41	14.89	15.41	15.41	15.92	16.41
	12H	15.26	15.73	15.77	16.22	16.79	15.26	15.73	15.77	16.22	16.79
12H	4H	13.46	14.08	13.94	14.56	15.03	13.46	14.08	13.94	14.56	15.03
	6H	14.55	15.07	15.07	15.59	16.08	14.55	15.07	15.07	15.59	16.08
	8H	15.04	15.51	15.56	16.00	16.57	15.04	15.51	15.56	16.00	16.57