

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: P979823

Luminaire Tested: PRLX-241-940-LL1-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-940-LL1-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

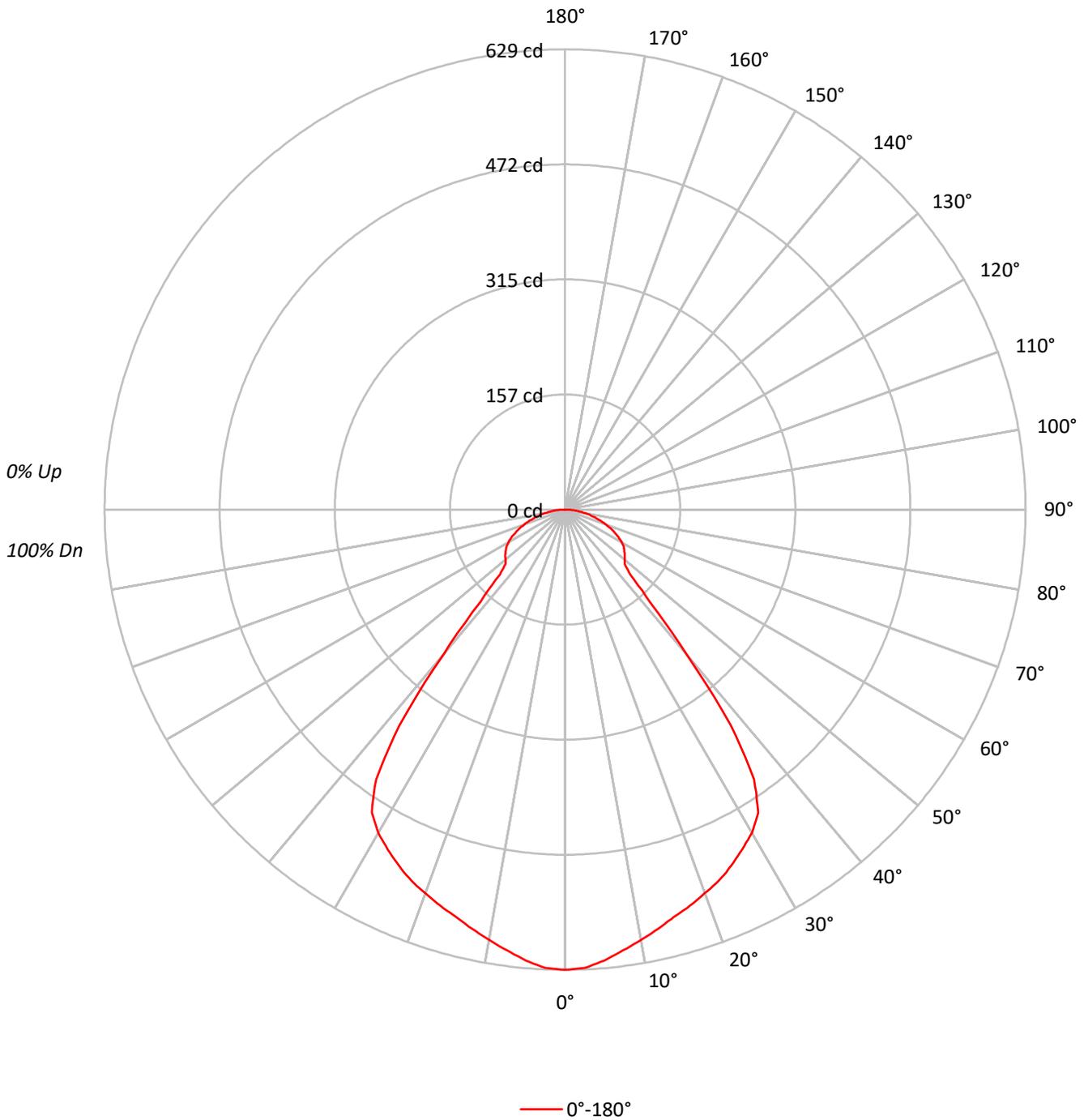
Lumens per Lamp: N/A
Luminaire Lumens: 1066.5 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.12
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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									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													100															
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88													88															
2	103	96	90	85	100	94	89	84	90	86	82	87	84	81	84	81	79	77													77															
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68													68															
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61													61															
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54													54															
6	77	66	58	52	76	65	58	52	63	57	52	62	56	51	60	55	51	49													49															
7	72	61	53	48	71	60	53	47	58	52	47	57	51	47	56	51	47	45													45															
8	68	56	49	43	67	55	48	43	54	48	43	53	47	43	52	47	43	41													41															
9	64	52	45	40	63	52	45	40	51	44	40	50	44	39	49	43	39	38													38															
10	60	49	42	37	59	48	41	37	47	41	37	46	41	36	46	40	36	35													35															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4848
5°	4786
10°	4675
15°	4597
20°	4578
25°	4569
30°	4543
35°	4237
40°	2608
45°	1372
50°	1272
55°	1329
60°	1377
65°	1366
70°	1328
75°	1266
80°	1190
85°	1097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 60°
 Luminance: 1377 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	5.5
10°-20°	163.0	15.3
20°-30°	247.5	23.2
30°-40°	263.7	24.7
40°-50°	112.6	10.6
50°-60°	88.3	8.3
60°-70°	73.9	6.9
70°-80°	45.0	4.2
80°-90°	14.2	1.3
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°	468.8	44.0
0°-40°	732.5	68.7
0°-60°	933.5	87.5
0°-90°	1066.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1066.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	629	
5°	618	58
15°	576	163
25°	537	247
35°	450	264
45°	126	113
55°	99	88
65°	75	74
75°	42	45
85°	12	14
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	628.9
2.5°	626.9
5°	618.4
7.5°	607.6
10°	597.2
12.5°	586.8
15°	576.0
17.5°	567.6
20°	558.0
22.5°	549.1
25°	537.1
27.5°	523.9
30°	510.3
32.5°	491.1
35°	450.2
37.5°	372.1
40°	259.2
42.5°	171.0
45°	125.8
47.5°	110.1
50°	106.1
52.5°	102.9
55°	98.9
57.5°	94.9
60°	89.3
62.5°	82.5
65°	74.9
67.5°	66.9
70°	58.9
72.5°	50.5
75°	42.5
77.5°	34.8
80°	26.8
82.5°	19.6
85°	12.4
87.5°	6.8
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	11.49	12.83	11.85	13.14	13.46	11.49	12.83	11.85	13.14	13.46
	3H	13.49	14.69	13.87	15.02	15.39	13.49	14.69	13.87	15.02	15.39
	4H	14.25	15.38	14.65	15.73	16.11	14.25	15.38	14.65	15.73	16.11
	6H	14.83	15.87	15.25	16.24	16.64	14.83	15.87	15.25	16.24	16.64
	8H	15.03	16.02	15.46	16.41	16.82	15.03	16.02	15.46	16.41	16.82
	12H	15.17	16.12	15.60	16.50	16.93	15.17	16.12	15.60	16.50	16.93
4H	2H	12.16	13.28	12.56	13.63	14.02	12.16	13.28	12.56	13.63	14.02
	3H	14.36	15.30	14.77	15.70	16.10	14.36	15.30	14.77	15.70	16.10
	4H	15.24	16.09	15.68	16.51	16.95	15.24	16.09	15.68	16.51	16.95
	6H	15.96	16.69	16.42	17.14	17.60	15.96	16.69	16.42	17.14	17.60
	8H	16.21	16.89	16.68	17.34	17.81	16.21	16.89	16.68	17.34	17.81
	12H	16.39	17.00	16.88	17.48	17.96	16.39	17.00	16.88	17.48	17.96
8H	4H	15.56	16.25	16.03	16.69	17.16	15.56	16.25	16.03	16.69	17.16
	6H	16.42	16.98	16.92	17.47	17.95	16.42	16.98	16.92	17.47	17.95
	8H	16.76	17.26	17.28	17.77	18.26	16.76	17.26	17.28	17.77	18.26
	12H	17.04	17.47	17.55	17.97	18.54	17.04	17.47	17.55	17.97	18.54
12H	4H	15.59	16.20	16.08	16.68	17.15	15.59	16.20	16.08	16.68	17.15
	6H	16.48	16.98	17.00	17.50	17.99	16.48	16.98	17.00	17.50	17.99
	8H	16.88	17.32	17.40	17.82	18.39	16.88	17.32	17.40	17.82	18.39