

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979871

Luminaire Tested: PRLX-241-940-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-940-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

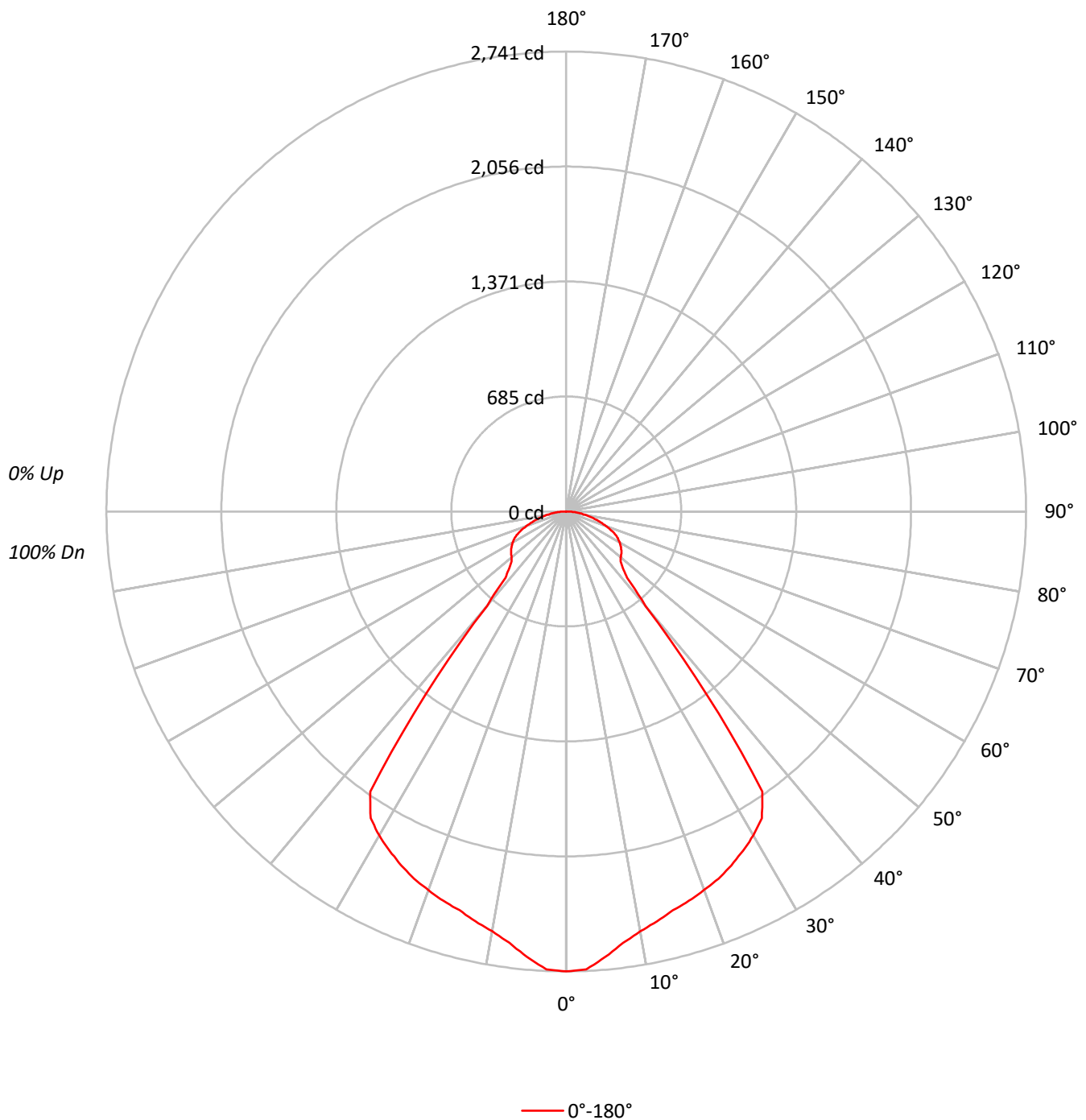
Lumens per Lamp: N/A
Luminaire Lumens: 4422.5 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.09
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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

TEST NUMBER: P979871

CATALOG NUMBER: PRLX-241-940-48L-C-U-S-WHTE-X

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
RW	70	50	30	10	70	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		100
1	111	107	103	100	108	105	101	98	100	98	95		97	94	92		88
2	103	96	90	85	100	94	89	84	91	86	83		87	84	81		77
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		68
4	89	79	71	66	87	78	71	65	75	69	65		73	68	64		61
5	83	72	64	59	81	71	64	59	69	63	58		67	62	57		55
6	78	66	59	53	76	65	58	53	64	57	52		62	56	52		50
7	73	61	54	48	71	60	53	48	59	53	48		58	52	48		45
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		42
9	65	53	46	41	63	52	45	41	51	45	40		50	44	40		38
10	61	49	42	38	60	49	42	37	48	42	37		47	41	37		36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	21130
5°	20634
10°	19893
15°	19636
20°	19703
25°	19794
30°	19854
35°	19170
40°	7403
45°	5203
50°	5095
55°	5391
60°	5671
65°	5841
70°	5646
75°	5335
80°	4999
85°	4626

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 65°
Luminance: 5841 cd/sqm

TEST NUMBER: P979871

CATALOG NUMBER: PRLX-241-940-48L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	5.7
10°-20°	697.2	15.8
20°-30°	1072.9	24.3
30°-40°	1091.4	24.7
40°-50°	391.0	8.8
50°-60°	357.5	8.1
60°-70°	312.4	7.1
70°-80°	190.0	4.3
80°-90°	59.7	1.4
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°	2020.5	45.7
0°-40°	3111.8	70.4
0°-60°	3860.4	87.3
0°-90°	4422.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4422.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2741	
5°	2666	250
15°	2460	697
25°	2327	1073
35°	2037	1091
45°	477	391
55°	401	358
65°	320	312
75°	179	190
85°	52	60
90°	0	

TEST NUMBER: P979871

CATALOG NUMBER: PRLX-241-940-48L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	2740.9
2.5°	2731.4
5°	2666.4
7.5°	2593.5
10°	2541.2
12.5°	2501.5
15°	2460.3
17.5°	2433.4
20°	2401.7
22.5°	2369.9
25°	2327.1
27.5°	2279.6
30°	2230.4
32.5°	2168.6
35°	2037.0
37.5°	1379.2
40°	735.6
42.5°	535.8
45°	477.2
47.5°	440.7
50°	424.8
52.5°	413.7
55°	401.1
57.5°	385.2
60°	367.8
62.5°	347.2
65°	320.2
67.5°	285.3
70°	250.5
72.5°	214.0
75°	179.1
77.5°	145.8
80°	112.6
82.5°	82.4
85°	52.3
87.5°	28.5
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	16.31	17.63	16.68	17.95	18.26	16.31	17.63	16.68	17.95	18.26
	3H	18.47	19.65	18.85	19.98	20.35	18.47	19.65	18.85	19.98	20.35
	4H	19.25	20.36	19.65	20.71	21.09	19.25	20.36	19.65	20.71	21.09
	6H	19.84	20.86	20.25	21.23	21.63	19.84	20.86	20.25	21.23	21.63
	8H	20.04	21.01	20.47	21.41	21.81	20.04	21.01	20.47	21.41	21.81
	12H	20.18	21.11	20.61	21.49	21.92	20.18	21.11	20.61	21.49	21.92
4H	2H	17.06	18.17	17.46	18.52	18.90	17.06	18.17	17.46	18.52	18.90
	3H	19.37	20.30	19.79	20.71	21.11	19.37	20.30	19.79	20.71	21.11
	4H	20.27	21.11	20.71	21.53	21.97	20.27	21.11	20.71	21.53	21.97
	6H	20.99	21.71	21.45	22.16	22.62	20.99	21.71	21.45	22.16	22.62
	8H	21.24	21.91	21.70	22.36	22.83	21.24	21.91	21.70	22.36	22.83
	12H	21.42	22.02	21.91	22.51	22.98	21.42	22.02	21.91	22.51	22.98
8H	4H	20.59	21.27	21.06	21.72	22.19	20.59	21.27	21.06	21.72	22.19
	6H	21.45	22.00	21.95	22.50	22.98	21.45	22.00	21.95	22.50	22.98
	8H	21.79	22.28	22.31	22.80	23.29	21.79	22.28	22.31	22.80	23.29
	12H	22.07	22.50	22.58	23.00	23.57	22.07	22.50	22.58	23.00	23.57
12H	4H	20.62	21.22	21.11	21.70	22.18	20.62	21.22	21.11	21.70	22.18
	6H	21.51	22.01	22.03	22.52	23.01	21.51	22.01	22.03	22.52	23.01
	8H	21.92	22.35	22.43	22.84	23.41	21.92	22.35	22.43	22.84	23.41