

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: P980511

Luminaire Tested: PRLX-243-940-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980511
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-243-940-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

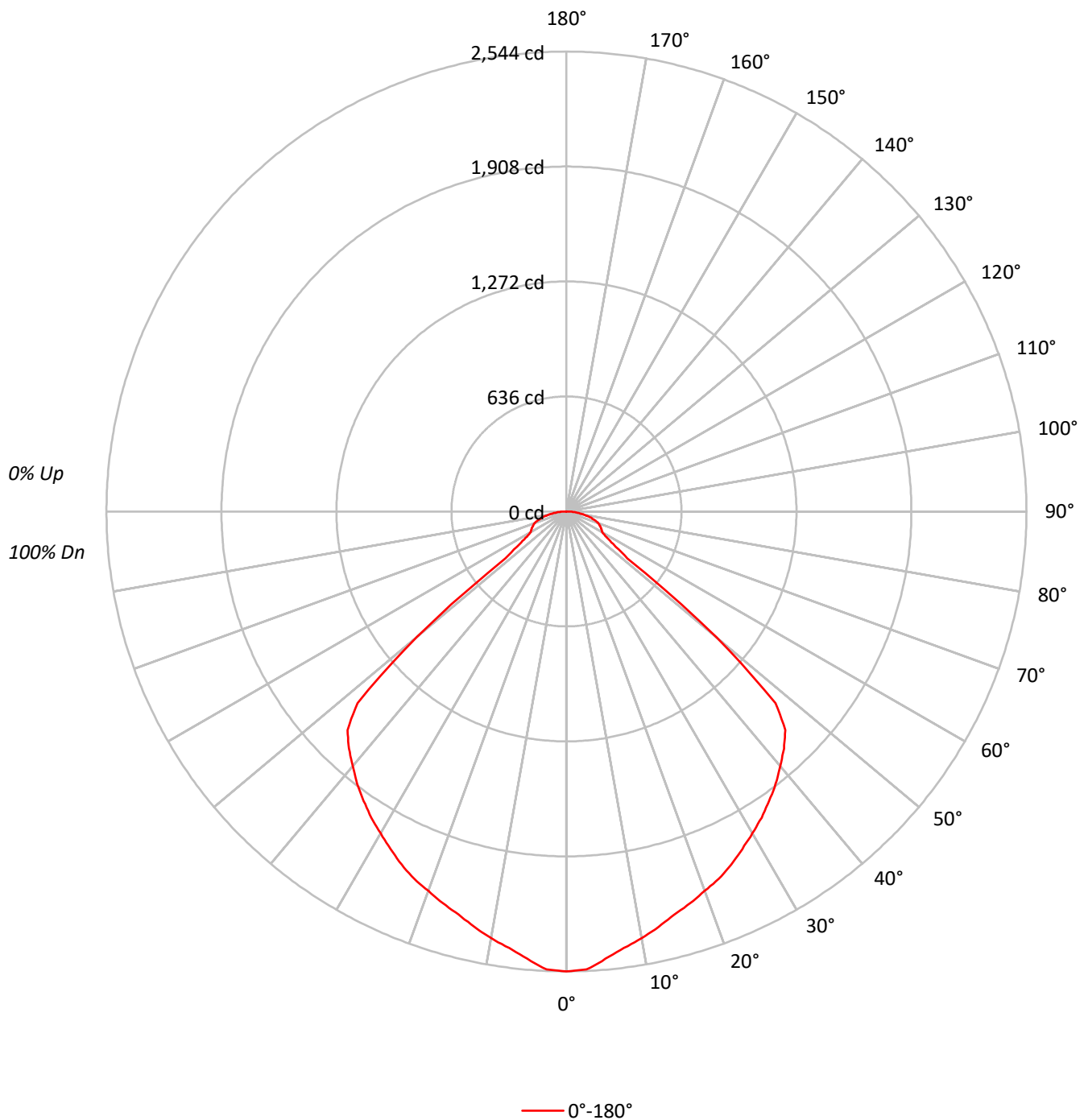
Lumens per Lamp: N/A
Luminaire Lumens: 5135.1 lumens
Efficiency: N/A
Efficacy: 153.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P980511

CATALOG NUMBER: PRLX-243-940-48L-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	104	100	108	105	102	99	101	98	96		97	95	93		88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		60
5	82	71	63	57	80	70	63	57	68	61	56		66	60	56		53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		48
7	71	59	51	46	70	58	51	46	57	50	45		56	49	45		43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		39
9	62	50	43	37	61	49	42	37	48	42	37		47	41	37		35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12553
5°	12303
10°	12008
15°	11781
20°	11727
25°	11736
30°	11714
35°	11773
40°	11844
45°	11946
50°	8298
55°	2700
60°	2253
65°	2443
70°	2676
75°	2779
80°	2657
85°	2695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 11946 cd/sqm

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CATALOG NUMBER: PRLX-243-940-48L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.3	4.6
10°-20°	653.1	12.7
20°-30°	993.4	19.3
30°-40°	1224.1	23.8
40°-50°	1255.8	24.5
50°-60°	364.9	7.1
60°-70°	206.5	4.0
70°-80°	151.0	2.9
80°-90°	52.0	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°	1880.9	36.6
0°-40°	3105.0	60.5
0°-60°	4725.7	92.0
0°-90°	5135.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5135.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2544	
5°	2484	234
15°	2306	653
25°	2156	993
35°	1955	1224
45°	1712	1256
55°	314	365
65°	209	206
75°	146	151
85°	48	52
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2544.3
2.5°	2536.4
5°	2484.1
7.5°	2434.9
10°	2396.9
12.5°	2354.1
15°	2306.5
17.5°	2273.2
20°	2233.6
22.5°	2200.3
25°	2155.9
27.5°	2105.2
30°	2056.1
32.5°	2008.5
35°	1954.6
37.5°	1900.7
40°	1838.9
42.5°	1780.2
45°	1712.1
47.5°	1567.8
50°	1081.1
52.5°	424.8
55°	313.9
57.5°	258.4
60°	228.3
62.5°	218.8
65°	209.3
67.5°	198.2
70°	185.5
72.5°	168.0
75°	145.8
77.5°	118.9
80°	93.5
82.5°	69.8
85°	47.6
87.5°	26.9
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	11.31	12.73	11.68	13.04	13.35	11.31	12.73	11.68	13.04	13.35
	3H	13.74	14.99	14.11	15.32	15.68	13.74	14.99	14.11	15.32	15.68
	4H	14.79	15.96	15.19	16.31	16.69	14.79	15.96	15.19	16.31	16.69
	6H	15.58	16.66	15.99	17.02	17.42	15.58	16.66	15.99	17.02	17.42
	8H	15.86	16.88	16.28	17.27	17.67	15.86	16.88	16.28	17.27	17.67
	12H	16.07	17.05	16.50	17.43	17.86	16.07	17.05	16.50	17.43	17.86
4H	2H	12.06	13.23	12.46	13.58	13.97	12.06	13.23	12.46	13.58	13.97
	3H	14.76	15.72	15.17	16.12	16.52	14.76	15.72	15.17	16.12	16.52
	4H	15.95	16.81	16.38	17.23	17.67	15.95	16.81	16.38	17.23	17.67
	6H	16.86	17.61	17.32	18.05	18.52	16.86	17.61	17.32	18.05	18.52
	8H	17.19	17.89	17.66	18.33	18.80	17.19	17.89	17.66	18.33	18.80
	12H	17.46	18.08	17.94	18.56	19.03	17.46	18.08	17.94	18.56	19.03
8H	4H	16.37	17.07	16.84	17.51	17.98	16.37	17.07	16.84	17.51	17.98
	6H	17.43	18.00	17.93	18.50	18.98	17.43	18.00	17.93	18.50	18.98
	8H	17.85	18.37	18.37	18.88	19.37	17.85	18.37	18.37	18.88	19.37
	12H	18.22	18.69	18.73	19.18	19.75	18.22	18.69	18.73	19.18	19.75
12H	4H	16.42	17.04	16.90	17.52	17.99	16.42	17.04	16.90	17.52	17.99
	6H	17.51	18.03	18.03	18.55	19.04	17.51	18.03	18.03	18.55	19.04
	8H	18.00	18.47	18.52	18.96	19.53	18.00	18.47	18.52	18.96	19.53