

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: P980271

Luminaire Tested: PRLX-243-927-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980271
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-243-927-48L-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

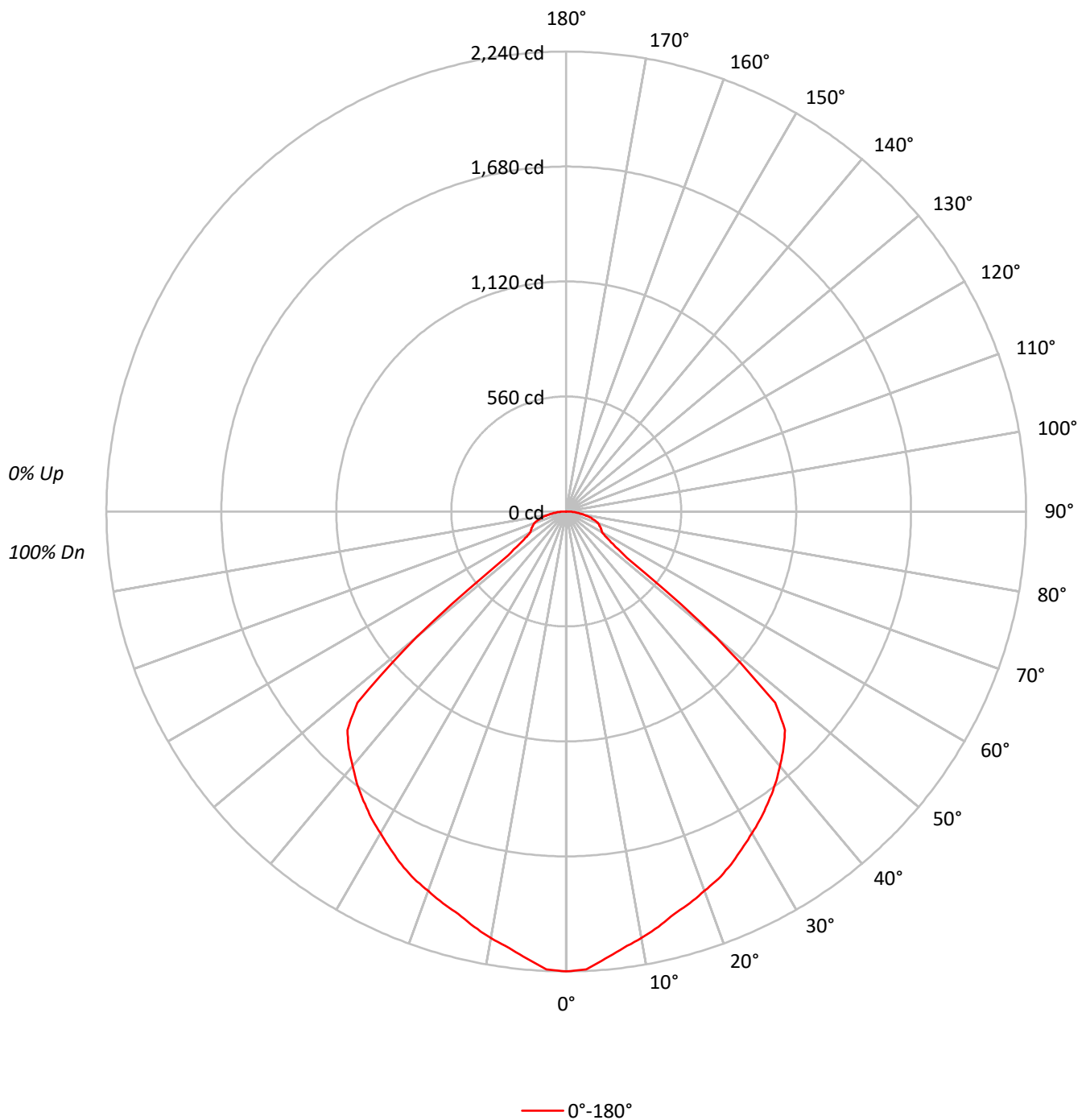
Lumens per Lamp: N/A
Luminaire Lumens: 4520.5 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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: P980271

CATALOG NUMBER: PRLX-243-927-48L-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°	11051
5°	10830
10°	10571
15°	10372
20°	10324
25°	10332
30°	10312
35°	10364
40°	10426
45°	10516
50°	7305
55°	2377
60°	1983
65°	2150
70°	2356
75°	2448
80°	2338
85°	2372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 10516 cd/sqm

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CATALOG NUMBER: PRLX-243-927-48L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.3	4.6
10°-20°	574.9	12.7
20°-30°	874.5	19.3
30°-40°	1077.6	23.8
40°-50°	1105.5	24.5
50°-60°	321.2	7.1
60°-70°	181.7	4.0
70°-80°	132.9	2.9
80°-90°	45.8	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°	1655.8	36.6
0°-40°	2733.4	60.5
0°-60°	4160.1	92.0
0°-90°	4520.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4520.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2240	
5°	2187	206
15°	2030	575
25°	1898	875
35°	1721	1078
45°	1507	1106
55°	276	321
65°	184	182
75°	128	133
85°	42	46
90°	0	

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CATALOG NUMBER: PRLX-243-927-48L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

	0°
0°	2239.8
2.5°	2232.8
5°	2186.8
7.5°	2143.5
10°	2110.0
12.5°	2072.3
15°	2030.5
17.5°	2001.2
20°	1966.3
22.5°	1937.0
25°	1897.9
27.5°	1853.2
30°	1810.0
32.5°	1768.1
35°	1720.7
37.5°	1673.2
40°	1618.8
42.5°	1567.2
45°	1507.1
47.5°	1380.2
50°	951.7
52.5°	374.0
55°	276.3
57.5°	227.5
60°	201.0
62.5°	192.6
65°	184.2
67.5°	174.4
70°	163.3
72.5°	147.9
75°	128.4
77.5°	104.7
80°	82.3
82.5°	61.4
85°	41.9
87.5°	23.7
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	10.87	12.28	11.24	12.60	12.91	10.87	12.28	11.24	12.60	12.91
	3H	13.29	14.55	13.67	14.88	15.24	13.29	14.55	13.67	14.88	15.24
	4H	14.35	15.52	14.75	15.87	16.25	14.35	15.52	14.75	15.87	16.25
	6H	15.13	16.21	15.55	16.58	16.97	15.13	16.21	15.55	16.58	16.97
	8H	15.41	16.44	15.84	16.83	17.23	15.41	16.44	15.84	16.83	17.23
	12H	15.63	16.61	16.06	16.99	17.42	15.63	16.61	16.06	16.99	17.42
4H	2H	11.62	12.79	12.02	13.14	13.52	11.62	12.79	12.02	13.14	13.52
	3H	14.31	15.27	14.73	15.67	16.08	14.31	15.27	14.73	15.67	16.08
	4H	15.51	16.37	15.94	16.78	17.23	15.51	16.37	15.94	16.78	17.23
	6H	16.42	17.16	16.88	17.61	18.07	16.42	17.16	16.88	17.61	18.07
	8H	16.75	17.45	17.21	17.89	18.36	16.75	17.45	17.21	17.89	18.36
	12H	17.01	17.63	17.50	18.12	18.59	17.01	17.63	17.50	18.12	18.59
8H	4H	15.93	16.63	16.40	17.07	17.54	15.93	16.63	16.40	17.07	17.54
	6H	16.98	17.56	17.48	18.06	18.54	16.98	17.56	17.48	18.06	18.54
	8H	17.41	17.93	17.92	18.44	18.93	17.41	17.93	17.92	18.44	18.93
	12H	17.78	18.24	18.29	18.74	19.30	17.78	18.24	18.29	18.74	19.30
12H	4H	15.98	16.60	16.46	17.08	17.55	15.98	16.60	16.46	17.08	17.55
	6H	17.07	17.59	17.59	18.10	18.59	17.07	17.59	17.59	18.10	18.59
	8H	17.56	18.03	18.07	18.52	19.09	17.56	18.03	18.07	18.52	19.09