

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: P980493

Luminaire Tested: PRLX-243-940-31L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-31L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

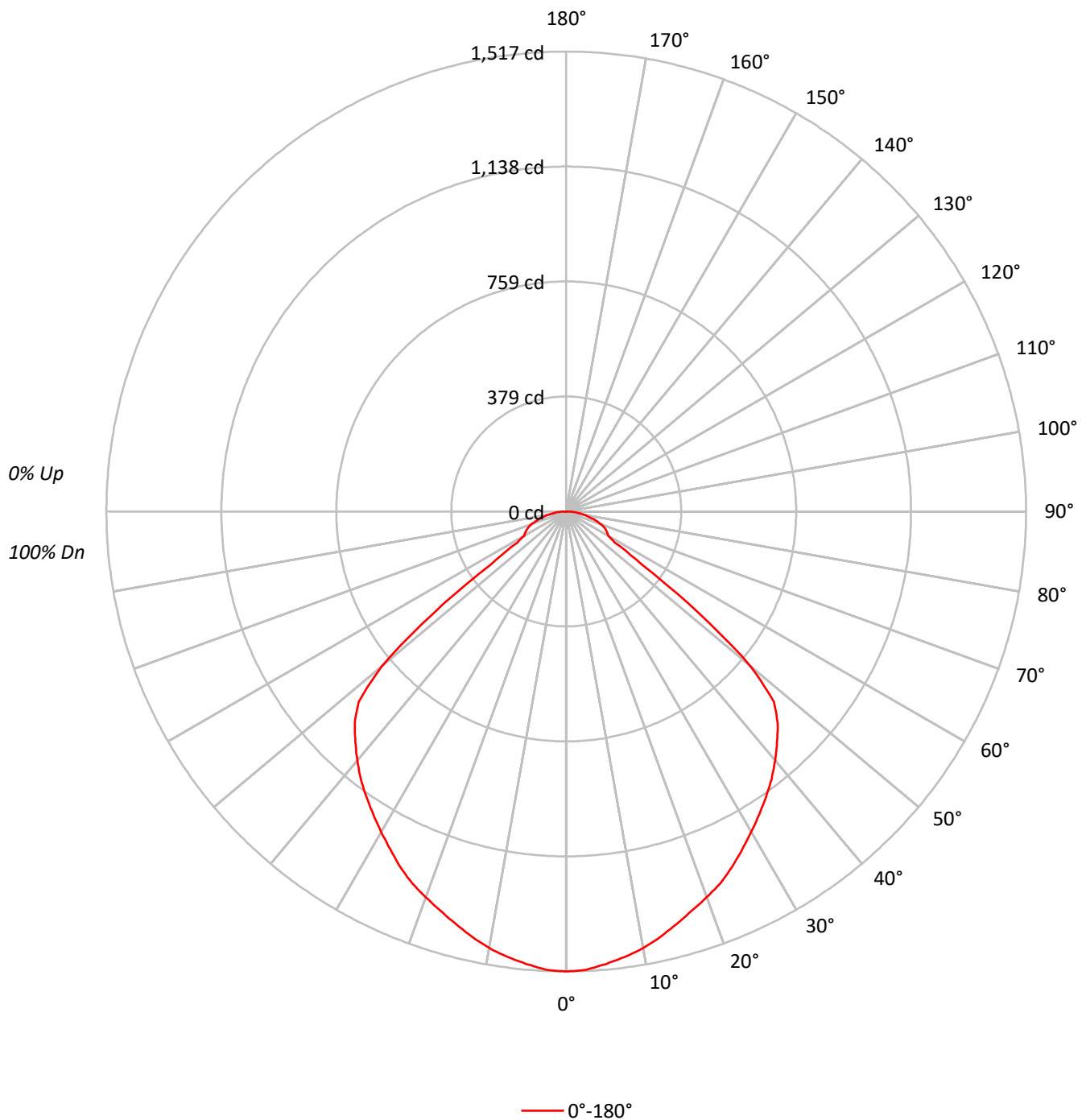
Lumens per Lamp: N/A
Luminaire Lumens: 3207.0 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.35
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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: P980493

CATALOG NUMBER: PRLX-243-940-31L-F-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		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	101	99	100	98	95		97	95	93		93
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		69
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63
6	76	64	56	50	74	63	55	50	61	54	49		59	53	49		58
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53
8	66	53	45	40	64	53	45	40	51	45	40		50	44	39		49
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7487
5°	7423
10°	7327
15°	7194
20°	7112
25°	7047
30°	6954
35°	6922
40°	6907
45°	6882
50°	6106
55°	2614
60°	1576
65°	1683
70°	1735
75°	1681
80°	1620
85°	1642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6882 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	4.4
10°-20°	397.7	12.4
20°-30°	596.0	18.6
30°-40°	719.5	22.4
40°-50°	748.5	23.3
50°-60°	336.7	10.5
60°-70°	141.3	4.4
70°-80°	93.4	2.9
80°-90°	31.7	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°	1135.7	35.4
0°-40°	1855.2	57.9
0°-60°	2940.5	91.7
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1517	
5°	1499	142
15°	1408	398
25°	1294	596
35°	1149	720
45°	986	749
55°	304	337
65°	144	141
75°	88	93
85°	29	32
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1517.4
2.5°	1513.2
5°	1498.7
7.5°	1482.1
10°	1462.4
12.5°	1437.5
15°	1408.5
17.5°	1380.5
20°	1354.5
22.5°	1327.6
25°	1294.4
27.5°	1257.0
30°	1220.7
32.5°	1184.4
35°	1149.2
37.5°	1112.9
40°	1072.4
42.5°	1029.9
45°	986.3
47.5°	929.3
50°	795.5
52.5°	555.9
55°	303.9
57.5°	189.8
60°	159.7
62.5°	152.5
65°	144.2
67.5°	133.8
70°	120.3
72.5°	104.8
75°	88.2
77.5°	72.6
80°	57.0
82.5°	42.5
85°	29.0
87.5°	16.6
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	10.74	12.19	11.10	12.50	12.81	10.74	12.19	11.10	12.50	12.81
	3H	12.83	14.12	13.21	14.44	14.81	12.83	14.12	13.21	14.44	14.81
	4H	13.66	14.86	14.06	15.21	15.59	13.66	14.86	14.06	15.21	15.59
	6H	14.30	15.41	14.72	15.78	16.17	14.30	15.41	14.72	15.78	16.17
	8H	14.54	15.59	14.97	15.98	16.38	14.54	15.59	14.97	15.98	16.38
	12H	14.72	15.72	15.15	16.11	16.54	14.72	15.72	15.15	16.11	16.54
4H	2H	11.40	12.60	11.80	12.95	13.33	11.40	12.60	11.80	12.95	13.33
	3H	13.74	14.73	14.15	15.13	15.53	13.74	14.73	14.15	15.13	15.53
	4H	14.70	15.59	15.14	16.00	16.44	14.70	15.59	15.14	16.00	16.44
	6H	15.49	16.25	15.95	16.69	17.16	15.49	16.25	15.95	16.69	17.16
	8H	15.77	16.49	16.24	16.93	17.40	15.77	16.49	16.24	16.93	17.40
	12H	16.01	16.64	16.49	17.12	17.60	16.01	16.64	16.49	17.12	17.60
8H	4H	15.06	15.77	15.52	16.22	16.69	15.06	15.77	15.52	16.22	16.69
	6H	15.98	16.57	16.48	17.07	17.55	15.98	16.57	16.48	17.07	17.55
	8H	16.36	16.89	16.87	17.40	17.89	16.36	16.89	16.87	17.40	17.89
	12H	16.69	17.17	17.20	17.66	18.23	16.69	17.17	17.20	17.66	18.23
12H	4H	15.09	15.73	15.58	16.21	16.69	15.09	15.73	15.58	16.21	16.69
	6H	16.05	16.59	16.57	17.10	17.59	16.05	16.59	16.57	17.10	17.59
	8H	16.49	16.97	17.01	17.47	18.03	16.49	16.97	17.01	17.47	18.03

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

7 of 7