

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: P980171

Luminaire Tested: PRLX-242-940-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-31L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

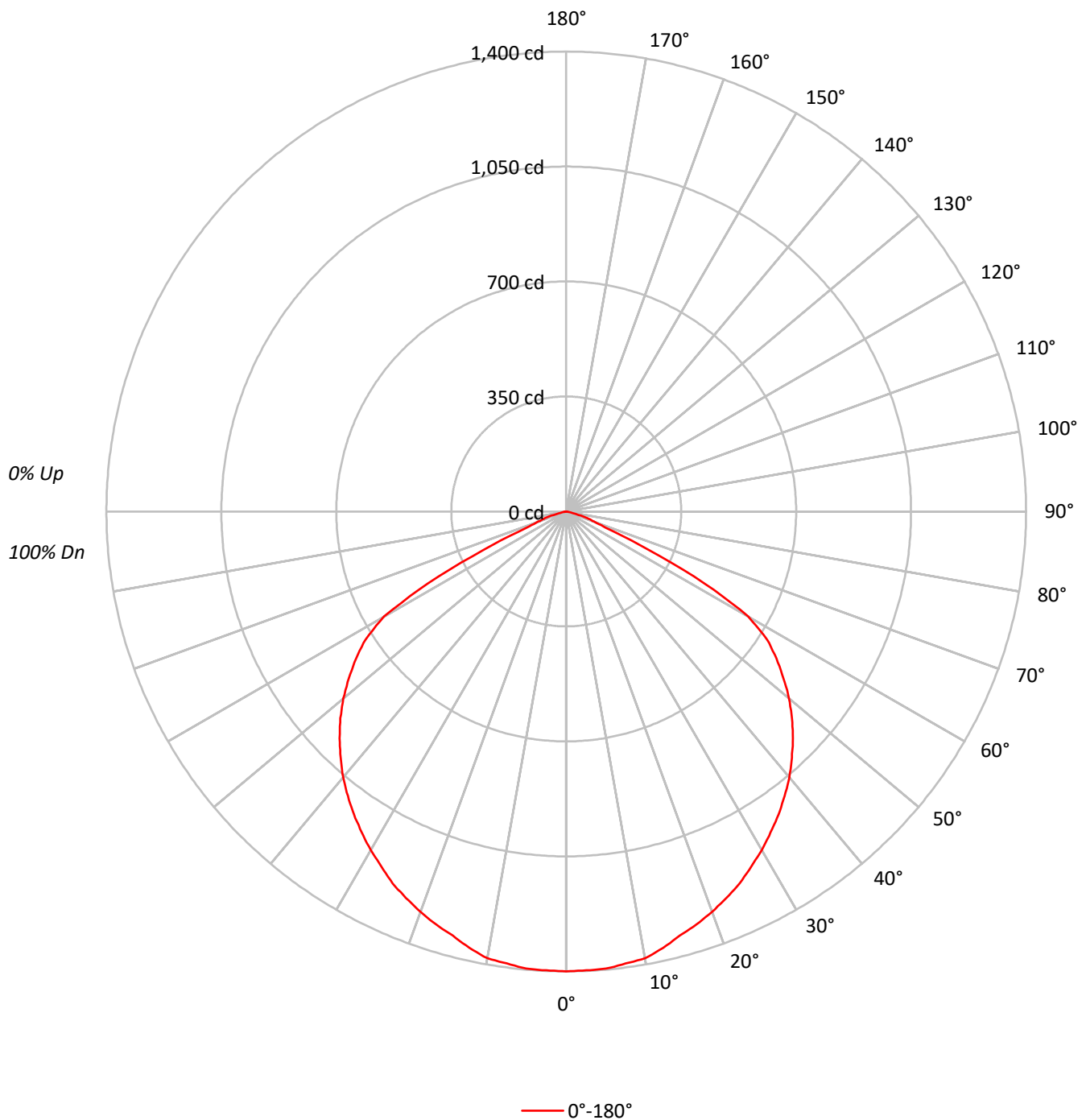
Lumens per Lamp: N/A
Luminaire Lumens: 3587.7 lumens
Efficiency: N/A
Efficacy: 174.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.6
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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6266
5°	6276
10°	6278
15°	6194
20°	6179
25°	6171
30°	6153
35°	6154
40°	6174
45°	6177
50°	6166
55°	6093
60°	5727
65°	2932
70°	1180
75°	557
80°	106
85°	159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6177 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.7	3.7
10°-20°	378.3	10.5
20°-30°	575.5	16.0
30°-40°	705.2	19.7
40°-50°	752.5	21.0
50°-60°	693.9	19.3
60°-70°	305.5	8.5
70°-80°	40.9	1.1
80°-90°	3.1	0.1
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°	1086.5	30.3
0°-40°	1791.8	49.9
0°-60°	3238.2	90.3
0°-90°	3587.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3587.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1400	
5°	1397	133
15°	1337	378
25°	1250	576
35°	1126	705
45°	976	753
55°	781	694
65°	277	306
75°	32	41
85°	3	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1400.2
2.5°	1398.1
5°	1397.1
7.5°	1387.7
10°	1381.5
12.5°	1360.8
15°	1336.9
17.5°	1318.2
20°	1297.5
22.5°	1273.6
25°	1249.8
27.5°	1218.7
30°	1190.7
32.5°	1158.5
35°	1126.4
37.5°	1092.1
40°	1056.9
42.5°	1016.4
45°	976.0
47.5°	932.4
50°	885.7
52.5°	833.9
55°	781.0
57.5°	725.0
60°	639.9
62.5°	476.1
65°	276.9
67.5°	128.6
70°	90.2
72.5°	67.4
75°	32.2
77.5°	9.3
80°	4.1
82.5°	4.1
85°	3.1
87.5°	2.1
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	19.21	20.76	19.58	21.08	21.39	19.21	20.76	19.58	21.08	21.39
	3H	19.26	20.64	19.64	20.96	21.33	19.26	20.64	19.64	20.96	21.33
	4H	19.23	20.51	19.63	20.86	21.24	19.23	20.51	19.63	20.86	21.24
	6H	19.17	20.35	19.58	20.72	21.11	19.17	20.35	19.58	20.72	21.11
	8H	19.13	20.26	19.56	20.65	21.05	19.13	20.26	19.56	20.65	21.05
	12H	19.10	20.18	19.53	20.56	20.99	19.10	20.18	19.53	20.56	20.99
4H	2H	19.31	20.59	19.71	20.94	21.32	19.31	20.59	19.71	20.94	21.32
	3H	19.40	20.45	19.81	20.85	21.25	19.40	20.45	19.81	20.85	21.25
	4H	19.36	20.30	19.80	20.71	21.15	19.36	20.30	19.80	20.71	21.15
	6H	19.31	20.11	19.76	20.56	21.02	19.31	20.11	19.76	20.56	21.02
	8H	19.26	20.01	19.73	20.46	20.93	19.26	20.01	19.73	20.46	20.93
	12H	19.23	19.90	19.71	20.38	20.85	19.23	19.90	19.71	20.38	20.85
8H	4H	19.28	20.03	19.74	20.47	20.94	19.28	20.03	19.74	20.47	20.94
	6H	19.20	19.81	19.69	20.30	20.78	19.20	19.81	19.69	20.30	20.78
	8H	19.14	19.70	19.66	20.21	20.70	19.14	19.70	19.66	20.21	20.70
	12H	19.11	19.60	19.62	20.09	20.66	19.11	19.60	19.62	20.09	20.66
12H	4H	19.24	19.91	19.73	20.39	20.86	19.24	19.91	19.73	20.39	20.86
	6H	19.14	19.70	19.66	20.21	20.70	19.14	19.70	19.66	20.21	20.70
	8H	19.11	19.60	19.62	20.09	20.66	19.11	19.60	19.62	20.09	20.66

END OF REPORT