

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: P980173

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-31L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

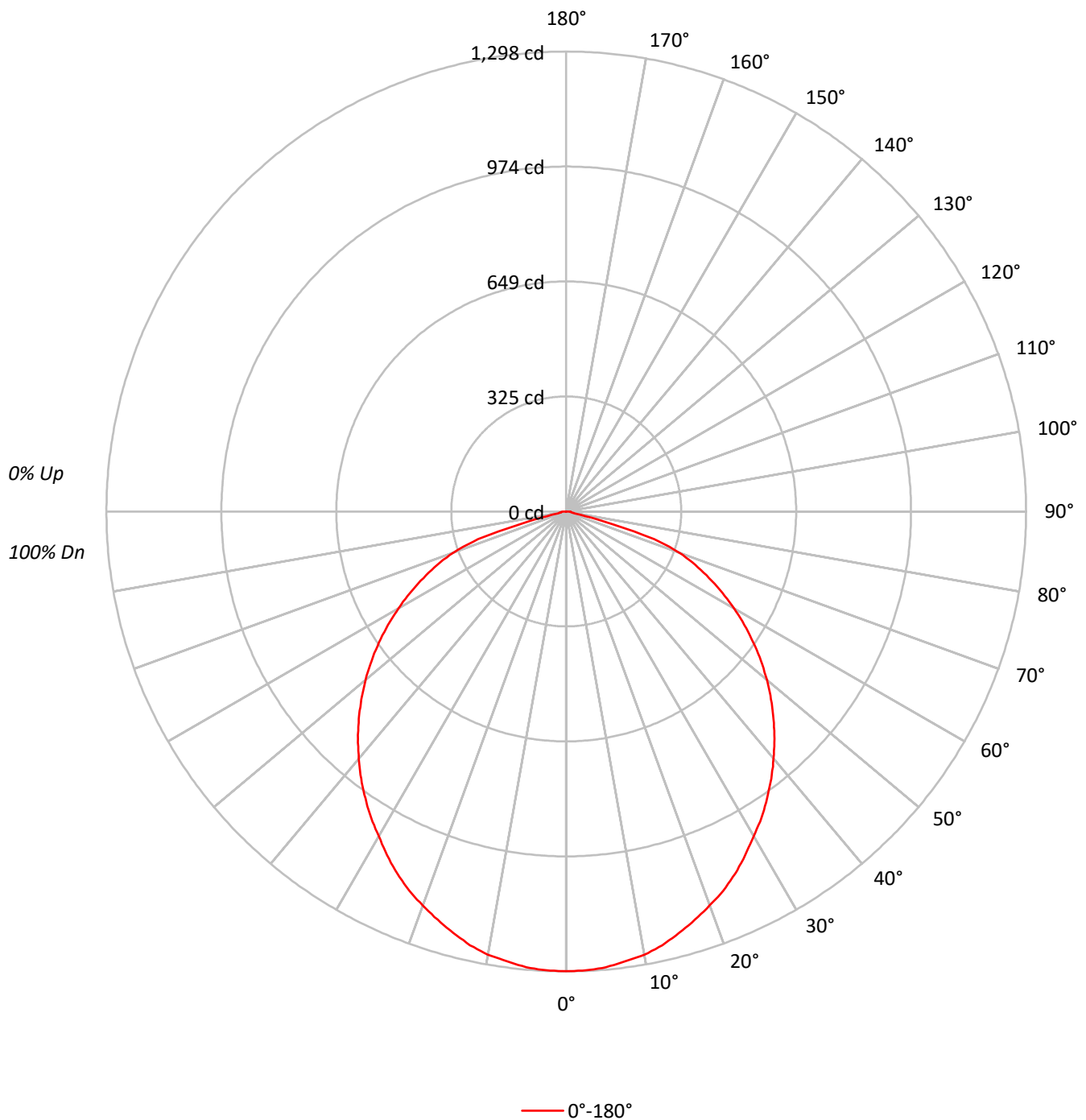
Lumens per Lamp: N/A
Luminaire Lumens: 3422.8 lumens
Efficiency: N/A
Efficacy: 165.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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

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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5806
5°	5801
10°	5773
15°	5704
20°	5636
25°	5572
30°	5467
35°	5400
40°	5320
45°	5238
50°	5148
55°	5033
60°	4892
65°	4711
70°	4451
75°	1847
80°	402
85°	637

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5238 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	3.6
10°-20°	347.4	10.1
20°-30°	519.2	15.2
30°-40°	618.5	18.1
40°-50°	638.5	18.7
50°-60°	576.4	16.8
60°-70°	440.2	12.9
70°-80°	148.7	4.3
80°-90°	11.4	0.3
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°	989.1	28.9
0°-40°	1607.6	47.0
0°-60°	2822.5	82.5
0°-90°	3422.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3422.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1298	
5°	1291	123
15°	1231	347
25°	1128	519
35°	988	618
45°	828	638
55°	645	576
65°	445	440
75°	107	149
85°	12	11
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1297.5
2.5°	1296.5
5°	1291.3
7.5°	1280.9
10°	1270.5
12.5°	1253.9
15°	1231.1
17.5°	1208.3
20°	1183.4
22.5°	1158.5
25°	1128.4
27.5°	1094.2
30°	1057.9
32.5°	1025.8
35°	988.4
37.5°	951.1
40°	910.6
42.5°	870.2
45°	827.7
47.5°	784.1
50°	739.5
52.5°	692.8
55°	645.1
57.5°	596.4
60°	546.6
62.5°	496.8
65°	444.9
67.5°	394.1
70°	340.2
72.5°	260.3
75°	106.8
77.5°	22.8
80°	15.6
82.5°	14.5
85°	12.4
87.5°	7.3
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	17.97	19.57	18.33	19.89	20.20	17.97	19.57	18.33	19.89	20.20
	3H	19.79	21.24	20.17	21.56	21.92	19.79	21.24	20.17	21.56	21.92
	4H	20.03	21.38	20.42	21.73	22.10	20.03	21.38	20.42	21.73	22.10
	6H	19.97	21.23	20.39	21.59	21.98	19.97	21.23	20.39	21.59	21.98
	8H	19.95	21.14	20.37	21.53	21.93	19.95	21.14	20.37	21.53	21.93
	12H	19.92	21.07	20.35	21.45	21.88	19.92	21.07	20.35	21.45	21.88
4H	2H	18.62	19.97	19.02	20.32	20.70	18.62	19.97	19.02	20.32	20.70
	3H	20.62	21.75	21.03	22.14	22.55	20.62	21.75	21.03	22.14	22.55
	4H	20.84	21.85	21.27	22.26	22.70	20.84	21.85	21.27	22.26	22.70
	6H	20.80	21.68	21.26	22.12	22.58	20.80	21.68	21.26	22.12	22.58
	8H	20.77	21.59	21.23	22.03	22.49	20.77	21.59	21.23	22.03	22.49
	12H	20.75	21.48	21.23	21.96	22.43	20.75	21.48	21.23	21.96	22.43
8H	4H	20.89	21.71	21.36	22.15	22.62	20.89	21.71	21.36	22.15	22.62
	6H	20.84	21.51	21.34	22.00	22.48	20.84	21.51	21.34	22.00	22.48
	8H	20.81	21.40	21.32	21.91	22.40	20.81	21.40	21.32	21.91	22.40
	12H	20.80	21.32	21.31	21.81	22.38	20.80	21.32	21.31	21.81	22.38
12H	4H	20.87	21.60	21.35	22.07	22.54	20.87	21.60	21.35	22.07	22.54
	6H	20.80	21.40	21.31	21.90	22.39	20.80	21.40	21.31	21.90	22.39
	8H	20.79	21.31	21.30	21.80	22.37	20.79	21.31	21.30	21.80	22.37