

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980213

Luminaire Tested: PRLX-242-940-LL8-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980213
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-LL8-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

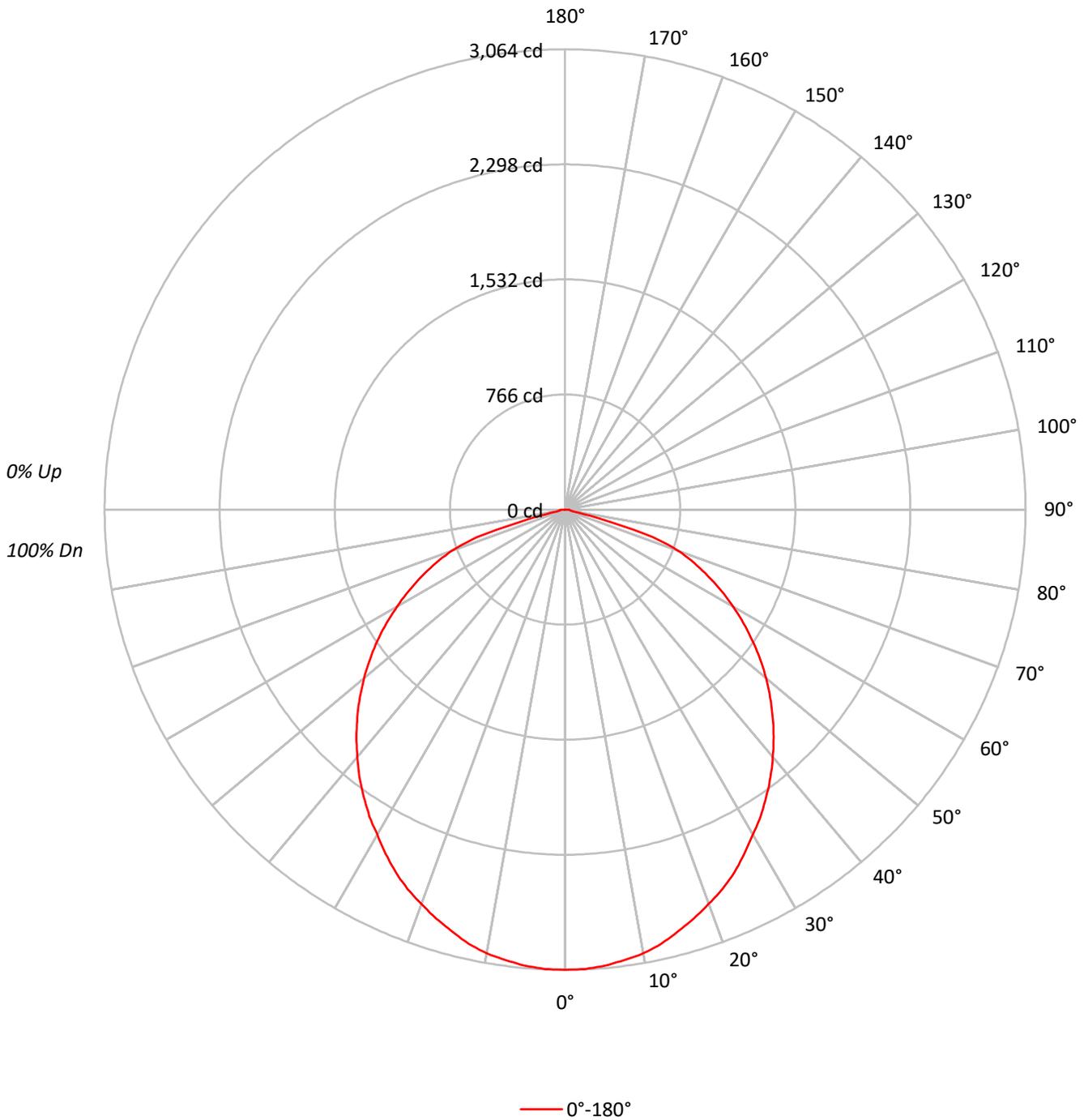
Lumens per Lamp: N/A
Luminaire Lumens: 8082.3 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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



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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	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13711
5°	13697
10°	13633
15°	13468
20°	13308
25°	13157
30°	12908
35°	12750
40°	12562
45°	12368
50°	12157
55°	11885
60°	11551
65°	11125
70°	10511
75°	4362
80°	946
85°	1510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12368 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.3	3.6
10°-20°	820.3	10.1
20°-30°	1226.0	15.2
30°-40°	1460.4	18.1
40°-50°	1507.6	18.7
50°-60°	1361.1	16.8
60°-70°	1039.5	12.9
70°-80°	351.1	4.3
80°-90°	27.0	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°	2335.7	28.9
0°-40°	3796.0	47.0
0°-60°	6664.8	82.5
0°-90°	8082.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8082.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3064	
5°	3049	289
15°	2907	820
25°	2665	1226
35°	2334	1460
45°	1954	1508
55°	1523	1361
65°	1051	1039
75°	252	351
85°	29	27
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	3063.8
2.5°	3061.3
5°	3049.1
7.5°	3024.6
10°	3000.1
12.5°	2960.9
15°	2907.0
17.5°	2853.1
20°	2794.4
22.5°	2735.6
25°	2664.6
27.5°	2583.7
30°	2498.0
32.5°	2422.1
35°	2333.9
37.5°	2245.8
40°	2150.3
42.5°	2054.8
45°	1954.3
47.5°	1851.5
50°	1746.2
52.5°	1636.0
55°	1523.3
57.5°	1408.2
60°	1290.6
62.5°	1173.1
65°	1050.6
67.5°	930.6
70°	803.3
72.5°	614.7
75°	252.3
77.5°	53.9
80°	36.7
82.5°	34.3
85°	29.4
87.5°	17.1
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	20.95	22.56	21.32	22.87	23.18	20.95	22.56	21.32	22.87	23.18
	3H	22.78	24.22	23.16	24.55	24.91	22.78	24.22	23.16	24.55	24.91
	4H	23.01	24.37	23.41	24.71	25.09	23.01	24.37	23.41	24.71	25.09
	6H	22.96	24.21	23.37	24.58	24.97	22.96	24.21	23.37	24.58	24.97
	8H	22.93	24.12	23.36	24.51	24.91	22.93	24.12	23.36	24.51	24.91
	12H	22.91	24.05	23.34	24.43	24.86	22.91	24.05	23.34	24.43	24.86
4H	2H	21.60	22.96	22.00	23.30	23.68	21.60	22.96	22.00	23.30	23.68
	3H	23.61	24.73	24.02	25.13	25.53	23.61	24.73	24.02	25.13	25.53
	4H	23.83	24.83	24.26	25.25	25.69	23.83	24.83	24.26	25.25	25.69
	6H	23.79	24.66	24.24	25.10	25.56	23.79	24.66	24.24	25.10	25.56
	8H	23.75	24.57	24.22	25.01	25.48	23.75	24.57	24.22	25.01	25.48
	12H	23.74	24.47	24.22	24.94	25.41	23.74	24.47	24.22	24.94	25.41
8H	4H	23.88	24.69	24.34	25.14	25.60	23.88	24.69	24.34	25.14	25.60
	6H	23.83	24.49	24.32	24.98	25.46	23.83	24.49	24.32	24.98	25.46
	8H	23.79	24.39	24.31	24.90	25.39	23.79	24.39	24.31	24.90	25.39
	12H	23.78	24.31	24.29	24.80	25.36	23.78	24.31	24.29	24.80	25.36
12H	4H	23.85	24.58	24.34	25.06	25.53	23.85	24.58	24.34	25.06	25.53
	6H	23.78	24.38	24.30	24.89	25.38	23.78	24.38	24.30	24.89	25.38
	8H	23.77	24.30	24.28	24.79	25.35	23.77	24.30	24.28	24.79	25.35