

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: P980203

Luminaire Tested: PRLX-242-940-LL7-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980203
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-LL7-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

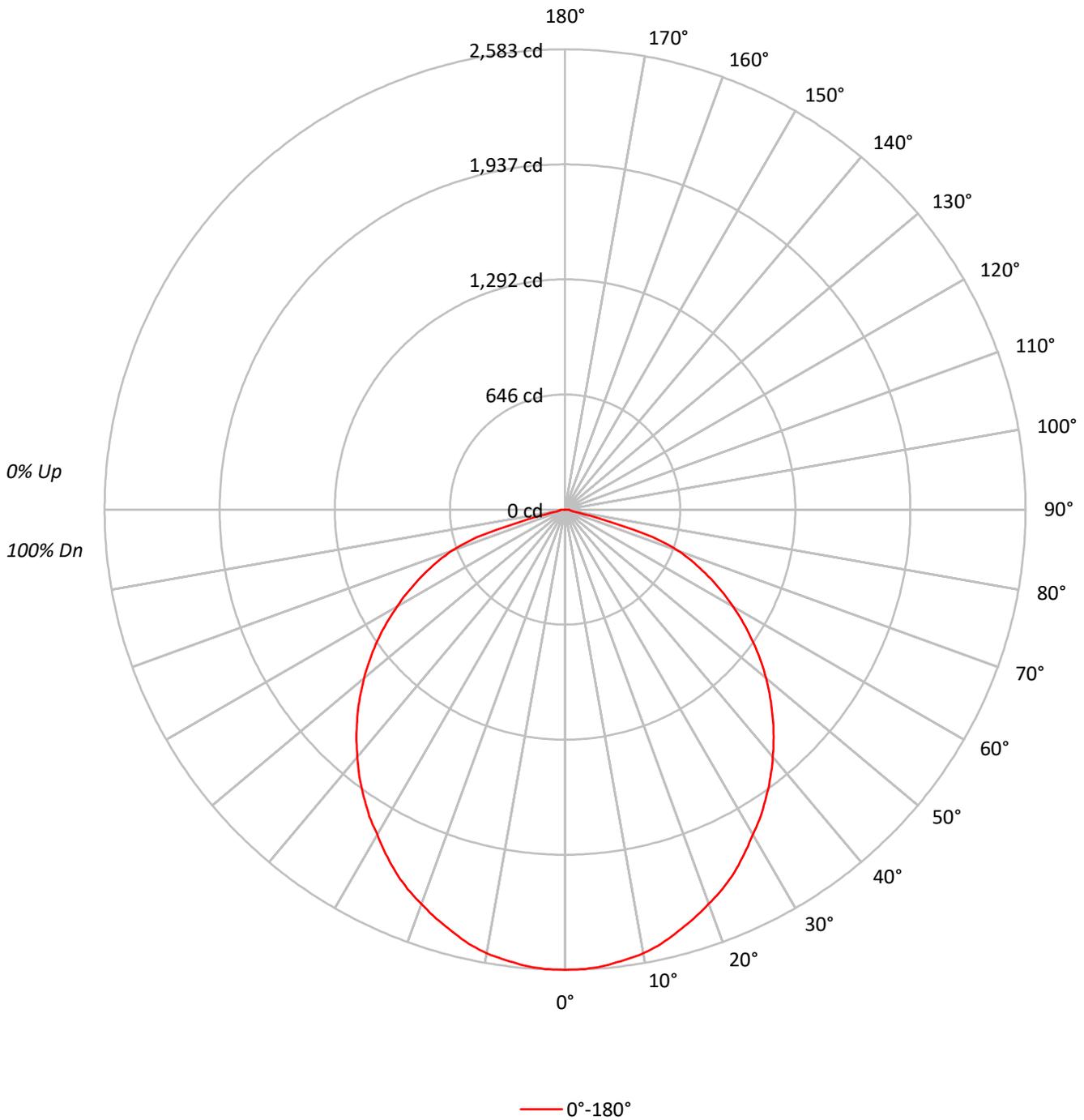
Lumens per Lamp: N/A
Luminaire Lumens: 6813.9 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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°	11559
5°	11547
10°	11494
15°	11355
20°	11219
25°	11092
30°	10883
35°	10750
40°	10590
45°	10427
50°	10249
55°	10019
60°	9739
65°	9380
70°	8861
75°	3678
80°	799
85°	1273

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10427 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.9	3.6
10°-20°	691.6	10.1
20°-30°	1033.6	15.2
30°-40°	1231.2	18.1
40°-50°	1271.0	18.7
50°-60°	1147.5	16.8
60°-70°	876.4	12.9
70°-80°	296.0	4.3
80°-90°	22.8	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°	1969.1	28.9
0°-40°	3200.3	47.0
0°-60°	5618.8	82.5
0°-90°	6813.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6813.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2583	
5°	2570	244
15°	2451	692
25°	2246	1034
35°	1968	1231
45°	1648	1271
55°	1284	1147
65°	886	876
75°	213	296
85°	25	23
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2582.9
2.5°	2580.9
5°	2570.5
7.5°	2549.9
10°	2529.3
12.5°	2496.2
15°	2450.8
17.5°	2405.4
20°	2355.8
22.5°	2306.3
25°	2246.4
27.5°	2178.3
30°	2106.0
32.5°	2042.0
35°	1967.7
37.5°	1893.3
40°	1812.8
42.5°	1732.3
45°	1647.6
47.5°	1560.9
50°	1472.1
52.5°	1379.2
55°	1284.2
57.5°	1187.2
60°	1088.1
62.5°	989.0
65°	885.8
67.5°	784.6
70°	677.2
72.5°	518.2
75°	212.7
77.5°	45.4
80°	31.0
82.5°	28.9
85°	24.8
87.5°	14.5
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	20.36	21.96	20.72	22.28	22.59	20.36	21.96	20.72	22.28	22.59
	3H	22.19	23.63	22.56	23.96	24.32	22.19	23.63	22.56	23.96	24.32
	4H	22.42	23.77	22.82	24.12	24.50	22.42	23.77	22.82	24.12	24.50
	6H	22.37	23.62	22.78	23.98	24.37	22.37	23.62	22.78	23.98	24.37
	8H	22.34	23.53	22.76	23.92	24.32	22.34	23.53	22.76	23.92	24.32
	12H	22.32	23.46	22.75	23.84	24.27	22.32	23.46	22.75	23.84	24.27
4H	2H	21.01	22.36	21.41	22.71	23.09	21.01	22.36	21.41	22.71	23.09
	3H	23.01	24.14	23.42	24.54	24.94	23.01	24.14	23.42	24.54	24.94
	4H	23.23	24.24	23.66	24.66	25.09	23.23	24.24	23.66	24.66	25.09
	6H	23.19	24.07	23.65	24.51	24.97	23.19	24.07	23.65	24.51	24.97
	8H	23.16	23.98	23.62	24.42	24.89	23.16	23.98	23.62	24.42	24.89
	12H	23.14	23.87	23.63	24.35	24.82	23.14	23.87	23.63	24.35	24.82
8H	4H	23.29	24.10	23.75	24.54	25.01	23.29	24.10	23.75	24.54	25.01
	6H	23.23	23.90	23.73	24.39	24.87	23.23	23.90	23.73	24.39	24.87
	8H	23.20	23.80	23.71	24.31	24.79	23.20	23.80	23.71	24.31	24.79
	12H	23.19	23.71	23.70	24.21	24.77	23.19	23.71	23.70	24.21	24.77
12H	4H	23.26	23.99	23.74	24.47	24.94	23.26	23.99	23.74	24.47	24.94
	6H	23.19	23.79	23.70	24.30	24.78	23.19	23.79	23.70	24.30	24.78
	8H	23.18	23.70	23.69	24.20	24.76	23.18	23.70	23.69	24.20	24.76