

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: P980140

Luminaire Tested: PRLX-242-940-LL1-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-LL1-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

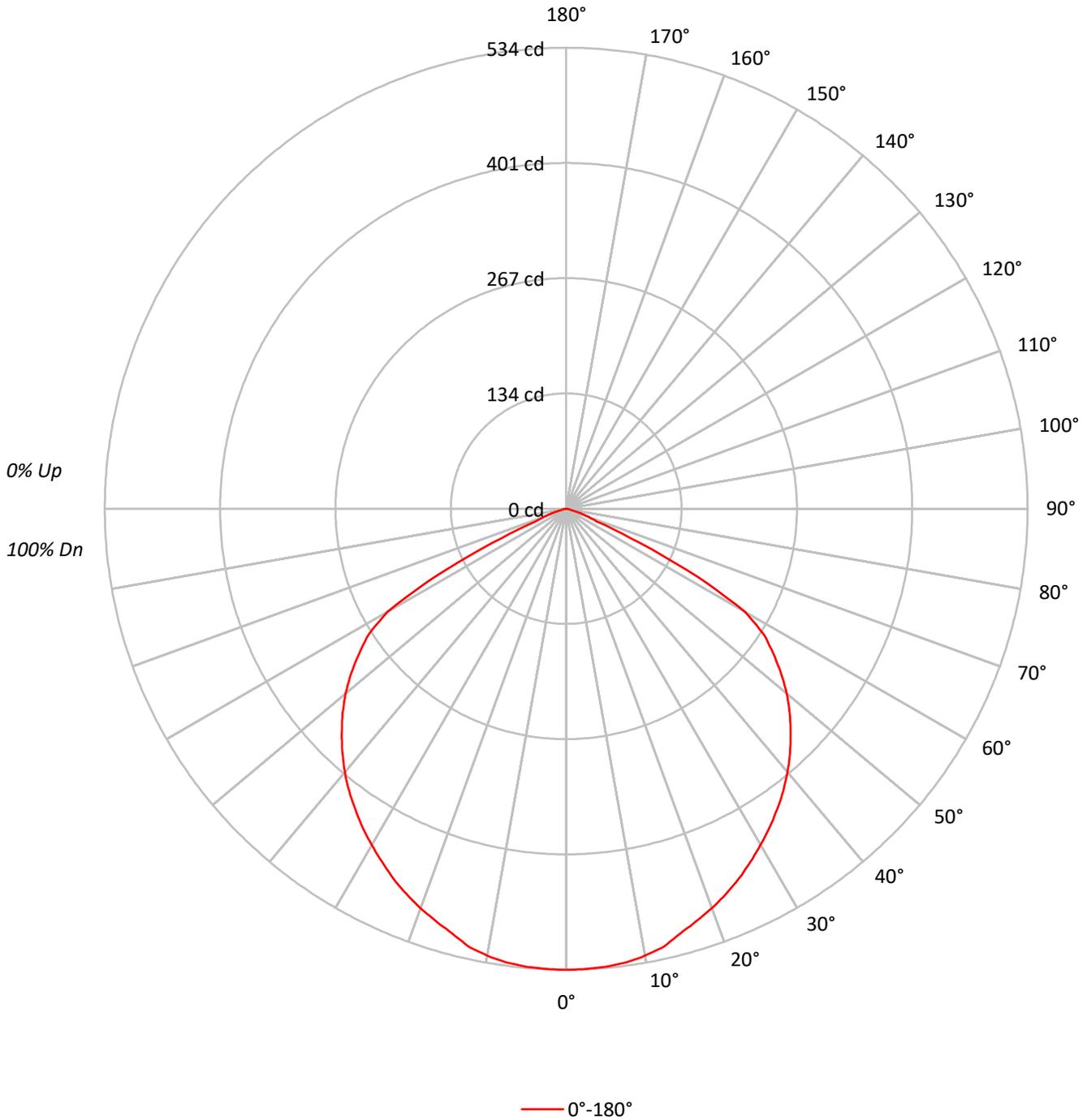
Lumens per Lamp: N/A
Luminaire Lumens: 1339.0 lumens
Efficiency: N/A
Efficacy: 178.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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	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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27				

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2391
5°	2393
10°	2390
15°	2361
20°	2346
25°	2336
30°	2324
35°	2324
40°	2328
45°	2325
50°	2320
55°	2281
60°	2136
65°	996
70°	335
75°	104
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2325 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	3.8
10°-20°	144.0	10.8
20°-30°	218.0	16.3
30°-40°	266.4	19.9
40°-50°	283.4	21.2
50°-60°	260.1	19.4
60°-70°	106.7	8.0
70°-80°	9.6	0.7
80°-90°	0.0	0.0
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°	412.7	30.8
0°-40°	679.1	50.7
0°-60°	1222.6	91.3
0°-90°	1339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1339.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	534	
5°	533	51
15°	510	144
25°	473	218
35°	425	266
45°	367	283
55°	292	260
65°	94	107
75°	6	10
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	534.3
2.5°	533.9
5°	532.7
7.5°	530.3
10°	525.9
12.5°	519.9
15°	509.5
17.5°	501.1
20°	492.7
22.5°	483.1
25°	473.0
27.5°	461.4
30°	449.8
32.5°	438.2
35°	425.4
37.5°	412.6
40°	398.5
42.5°	383.3
45°	367.3
47.5°	350.9
50°	333.3
52.5°	313.6
55°	292.4
57.5°	271.2
60°	238.7
62.5°	172.2
65°	94.1
67.5°	37.7
70°	25.6
72.5°	17.6
75°	6.0
77.5°	0.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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	15.82	17.36	16.19	17.67	17.99	15.82	17.36	16.19	17.67	17.99
	3H	15.80	17.17	16.18	17.50	17.86	15.80	17.17	16.18	17.50	17.86
	4H	15.75	17.03	16.15	17.37	17.75	15.75	17.03	16.15	17.37	17.75
	6H	15.69	16.86	16.10	17.23	17.62	15.69	16.86	16.10	17.23	17.62
	8H	15.66	16.77	16.08	17.16	17.56	15.66	16.77	16.08	17.16	17.56
	12H	15.62	16.69	16.05	17.07	17.50	15.62	16.69	16.05	17.07	17.50
4H	2H	15.87	17.15	16.27	17.50	17.87	15.87	17.15	16.27	17.50	17.87
	3H	15.89	16.92	16.30	17.32	17.72	15.89	16.92	16.30	17.32	17.72
	4H	15.83	16.75	16.26	17.17	17.61	15.83	16.75	16.26	17.17	17.61
	6H	15.77	16.56	16.23	17.01	17.47	15.77	16.56	16.23	17.01	17.47
	8H	15.72	16.46	16.19	16.91	17.38	15.72	16.46	16.19	16.91	17.38
	12H	15.69	16.35	16.17	16.83	17.30	15.69	16.35	16.17	16.83	17.30
8H	4H	15.73	16.47	16.20	16.92	17.38	15.73	16.47	16.20	16.92	17.38
	6H	15.65	16.25	16.14	16.75	17.22	15.65	16.25	16.14	16.75	17.22
	8H	15.59	16.14	16.11	16.65	17.14	15.59	16.14	16.11	16.65	17.14
	12H	15.55	16.04	16.06	16.53	17.10	15.55	16.04	16.06	16.53	17.10
12H	4H	15.70	16.35	16.18	16.83	17.30	15.70	16.35	16.18	16.83	17.30
	6H	15.59	16.14	16.11	16.65	17.14	15.59	16.14	16.11	16.65	17.14
	8H	15.55	16.04	16.06	16.53	17.10	15.55	16.04	16.06	16.53	17.10