

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: P980210

Luminaire Tested: PRLX-242-940-LL8-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980210
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-LL8-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

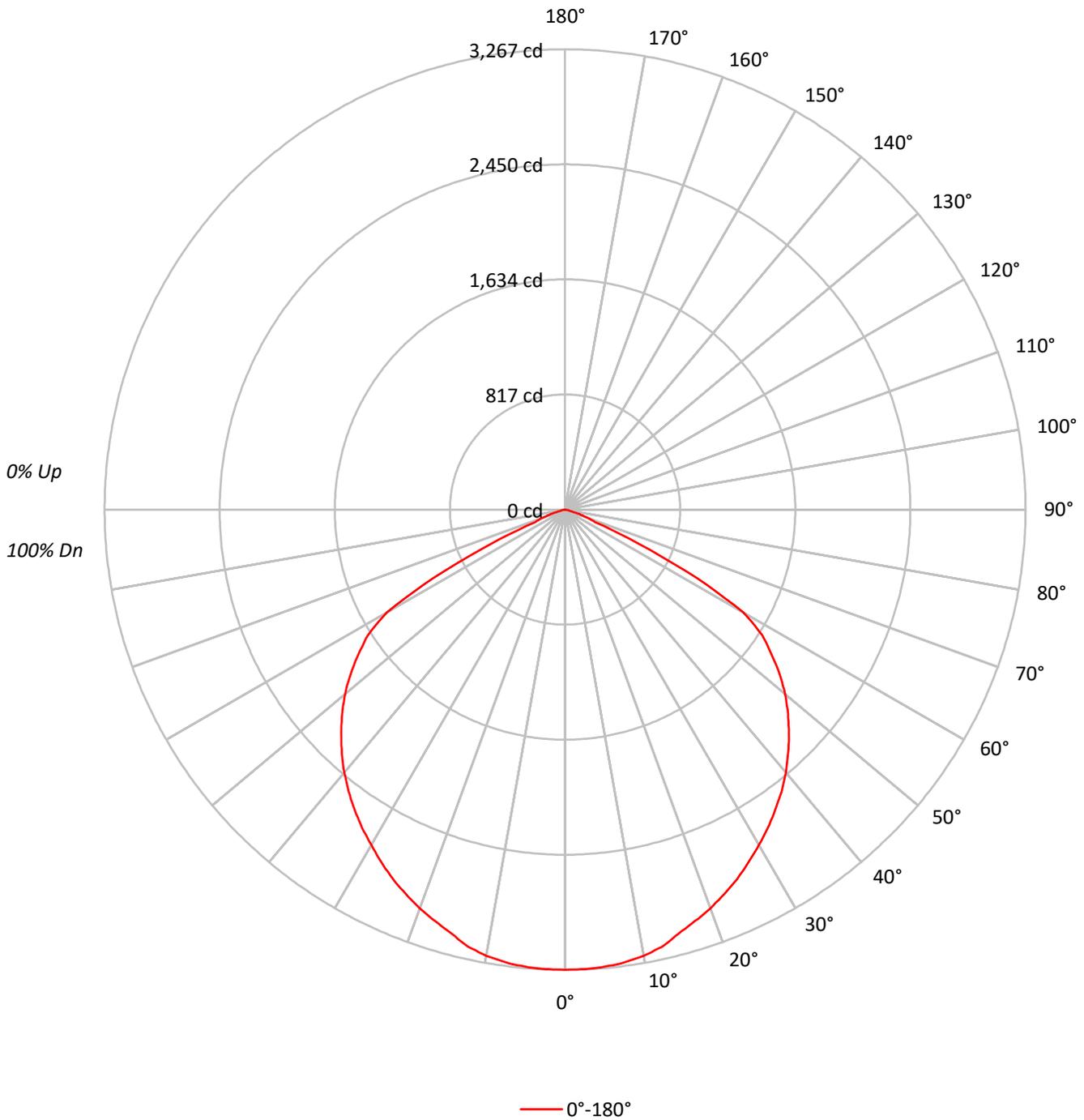
Lumens per Lamp: N/A
Luminaire Lumens: 8186.9 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	14620
5°	14632
10°	14612
15°	14433
20°	14346
25°	14281
30°	14212
35°	14209
40°	14235
45°	14213
50°	14186
55°	13949
60°	13064
65°	6094
70°	2050
75°	635
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14213 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.6	3.8
10°-20°	880.7	10.8
20°-30°	1332.8	16.3
30°-40°	1628.9	19.9
40°-50°	1732.9	21.2
50°-60°	1590.4	19.4
60°-70°	652.7	8.0
70°-80°	58.9	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°	2523.2	30.8
0°-40°	4152.1	50.7
0°-60°	7475.4	91.3
0°-90°	8186.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8186.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3267	
5°	3257	310
15°	3115	881
25°	2892	1333
35°	2601	1629
45°	2246	1733
55°	1788	1590
65°	576	653
75°	37	59
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	3267.0
2.5°	3264.6
5°	3257.2
7.5°	3242.5
10°	3215.6
12.5°	3178.9
15°	3115.2
17.5°	3063.8
20°	3012.3
22.5°	2953.6
25°	2892.3
27.5°	2821.3
30°	2750.3
32.5°	2679.3
35°	2600.9
37.5°	2522.5
40°	2436.8
42.5°	2343.7
45°	2245.8
47.5°	2145.4
50°	2037.6
52.5°	1917.6
55°	1787.8
57.5°	1658.0
60°	1459.6
62.5°	1053.1
65°	575.5
67.5°	230.2
70°	156.7
72.5°	107.8
75°	36.7
77.5°	2.4
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	22.11	23.65	22.48	23.96	24.28	22.11	23.65	22.48	23.96	24.28
	3H	22.09	23.46	22.47	23.79	24.15	22.09	23.46	22.47	23.79	24.15
	4H	22.04	23.32	22.44	23.66	24.04	22.04	23.32	22.44	23.66	24.04
	6H	21.98	23.15	22.39	23.52	23.91	21.98	23.15	22.39	23.52	23.91
	8H	21.95	23.06	22.37	23.45	23.85	21.95	23.06	22.37	23.45	23.85
	12H	21.91	22.98	22.34	23.36	23.79	21.91	22.98	22.34	23.36	23.79
4H	2H	22.16	23.44	22.56	23.79	24.16	22.16	23.44	22.56	23.79	24.16
	3H	22.18	23.21	22.59	23.61	24.01	22.18	23.21	22.59	23.61	24.01
	4H	22.12	23.04	22.55	23.46	23.90	22.12	23.04	22.55	23.46	23.90
	6H	22.06	22.85	22.52	23.30	23.76	22.06	22.85	22.52	23.30	23.76
	8H	22.01	22.75	22.48	23.20	23.67	22.01	22.75	22.48	23.20	23.67
	12H	21.98	22.64	22.46	23.12	23.59	21.98	22.64	22.46	23.12	23.59
8H	4H	22.02	22.76	22.49	23.21	23.67	22.02	22.76	22.49	23.21	23.67
	6H	21.94	22.54	22.43	23.04	23.51	21.94	22.54	22.43	23.04	23.51
	8H	21.88	22.43	22.40	22.94	23.43	21.88	22.43	22.40	22.94	23.43
	12H	21.84	22.33	22.35	22.82	23.39	21.84	22.33	22.35	22.82	23.39
12H	4H	21.99	22.64	22.47	23.12	23.60	21.99	22.64	22.47	23.12	23.60
	6H	21.88	22.43	22.40	22.94	23.43	21.88	22.43	22.40	22.94	23.43
	8H	21.84	22.33	22.35	22.82	23.39	21.84	22.33	22.35	22.82	23.39