

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: P980090

Luminaire Tested: PRLX-242-935-LL4-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980090
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-242-935-LL4-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

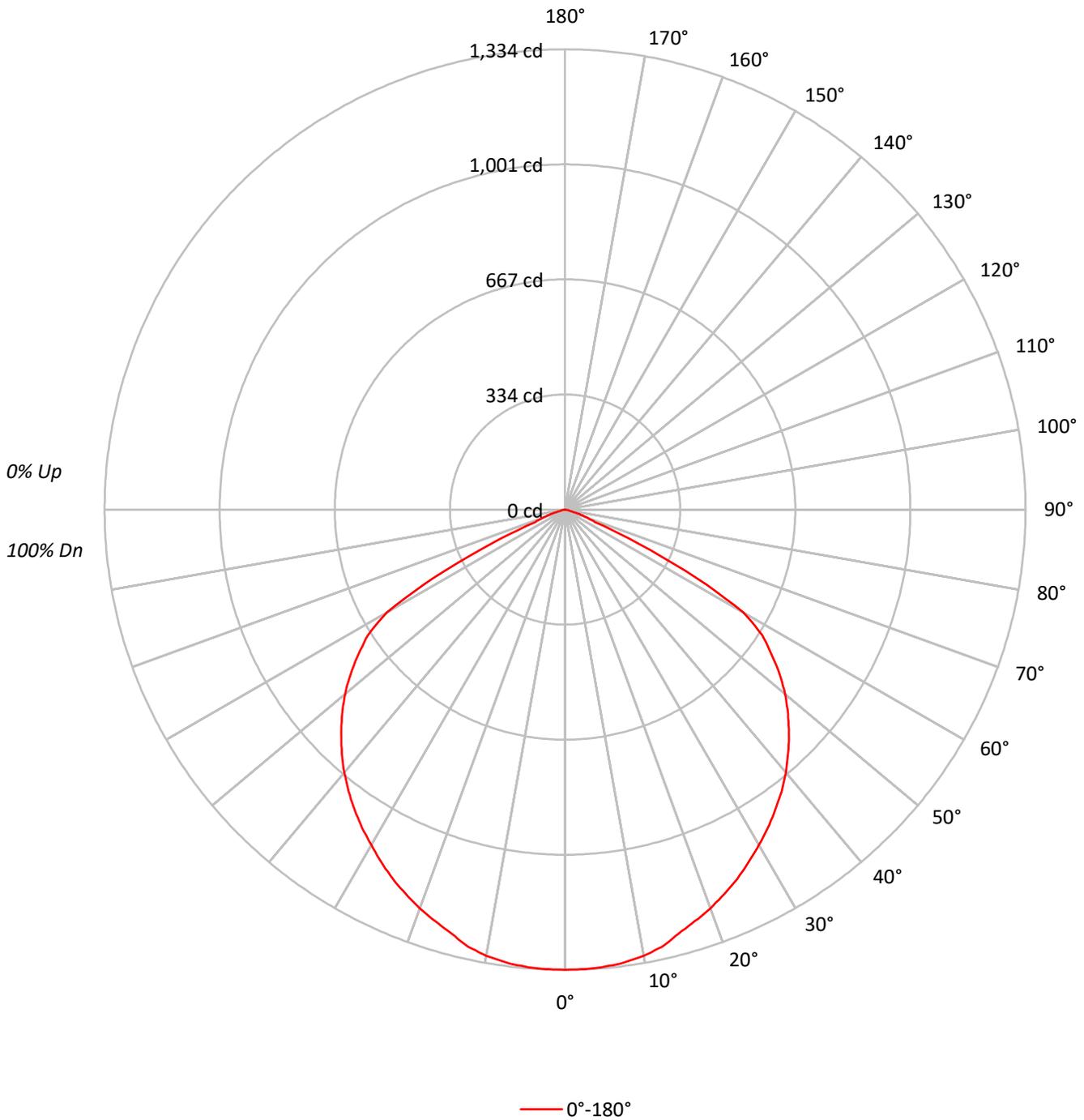
Lumens per Lamp: N/A
Luminaire Lumens: 3342.9 lumens
Efficiency: N/A
Efficacy: 163.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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			100	
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88	
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76			76	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65			65	
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56			56	
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49	
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43			43	
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38			38	
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34			34	
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30			30	
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27			27	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5970
5°	5975
10°	5966
15°	5893
20°	5858
25°	5831
30°	5803
35°	5802
40°	5813
45°	5803
50°	5792
55°	5696
60°	5334
65°	2488
70°	837
75°	259
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.8
10°-20°	359.6	10.8
20°-30°	544.2	16.3
30°-40°	665.1	19.9
40°-50°	707.6	21.2
50°-60°	649.4	19.4
60°-70°	266.5	8.0
70°-80°	24.0	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°	1030.3	30.8
0°-40°	1695.4	50.7
0°-60°	3052.4	91.3
0°-90°	3342.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3342.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1334	
5°	1330	126
15°	1272	360
25°	1181	544
35°	1062	665
45°	917	708
55°	730	649
65°	235	267
75°	15	24
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1334
2.5°	1333
5°	1330
7.5°	1324
10°	1313
12.5°	1298
15°	1272
17.5°	1251
20°	1230
22.5°	1206
25°	1181
27.5°	1152
30°	1123
32.5°	1094
35°	1062
37.5°	1030
40°	995
42.5°	957
45°	917
47.5°	876
50°	832
52.5°	783
55°	730
57.5°	677
60°	596
62.5°	430
65°	235
67.5°	94
70°	64
72.5°	44
75°	15
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	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	19.00	20.54	19.36	20.85	21.16	19.00	20.54	19.36	20.85	21.16
	3H	18.98	20.35	19.36	20.67	21.04	18.98	20.35	19.36	20.67	21.04
	4H	18.93	20.20	19.33	20.55	20.93	18.93	20.20	19.33	20.55	20.93
	6H	18.87	20.04	19.28	20.41	20.80	18.87	20.04	19.28	20.41	20.80
	8H	18.83	19.95	19.26	20.34	20.74	18.83	19.95	19.26	20.34	20.74
	12H	18.80	19.86	19.23	20.25	20.68	18.80	19.86	19.23	20.25	20.68
4H	2H	19.05	20.32	19.45	20.67	21.05	19.05	20.32	19.45	20.67	21.05
	3H	19.07	20.10	19.48	20.50	20.90	19.07	20.10	19.48	20.50	20.90
	4H	19.01	19.93	19.44	20.34	20.78	19.01	19.93	19.44	20.34	20.78
	6H	18.95	19.74	19.41	20.18	20.65	18.95	19.74	19.41	20.18	20.65
	8H	18.90	19.64	19.37	20.09	20.55	18.90	19.64	19.37	20.09	20.55
	12H	18.87	19.52	19.35	20.00	20.48	18.87	19.52	19.35	20.00	20.48
8H	4H	18.91	19.65	19.37	20.09	20.56	18.91	19.65	19.37	20.09	20.56
	6H	18.82	19.43	19.32	19.92	20.40	18.82	19.43	19.32	19.92	20.40
	8H	18.77	19.31	19.28	19.83	20.32	18.77	19.31	19.28	19.83	20.32
	12H	18.73	19.22	19.24	19.71	20.28	18.73	19.22	19.24	19.71	20.28
12H	4H	18.87	19.53	19.36	20.01	20.48	18.87	19.53	19.36	20.01	20.48
	6H	18.77	19.31	19.28	19.83	20.32	18.77	19.31	19.28	19.83	20.32
	8H	18.73	19.22	19.24	19.71	20.28	18.73	19.22	19.24	19.71	20.28