

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: P980092

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-935-LL4-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

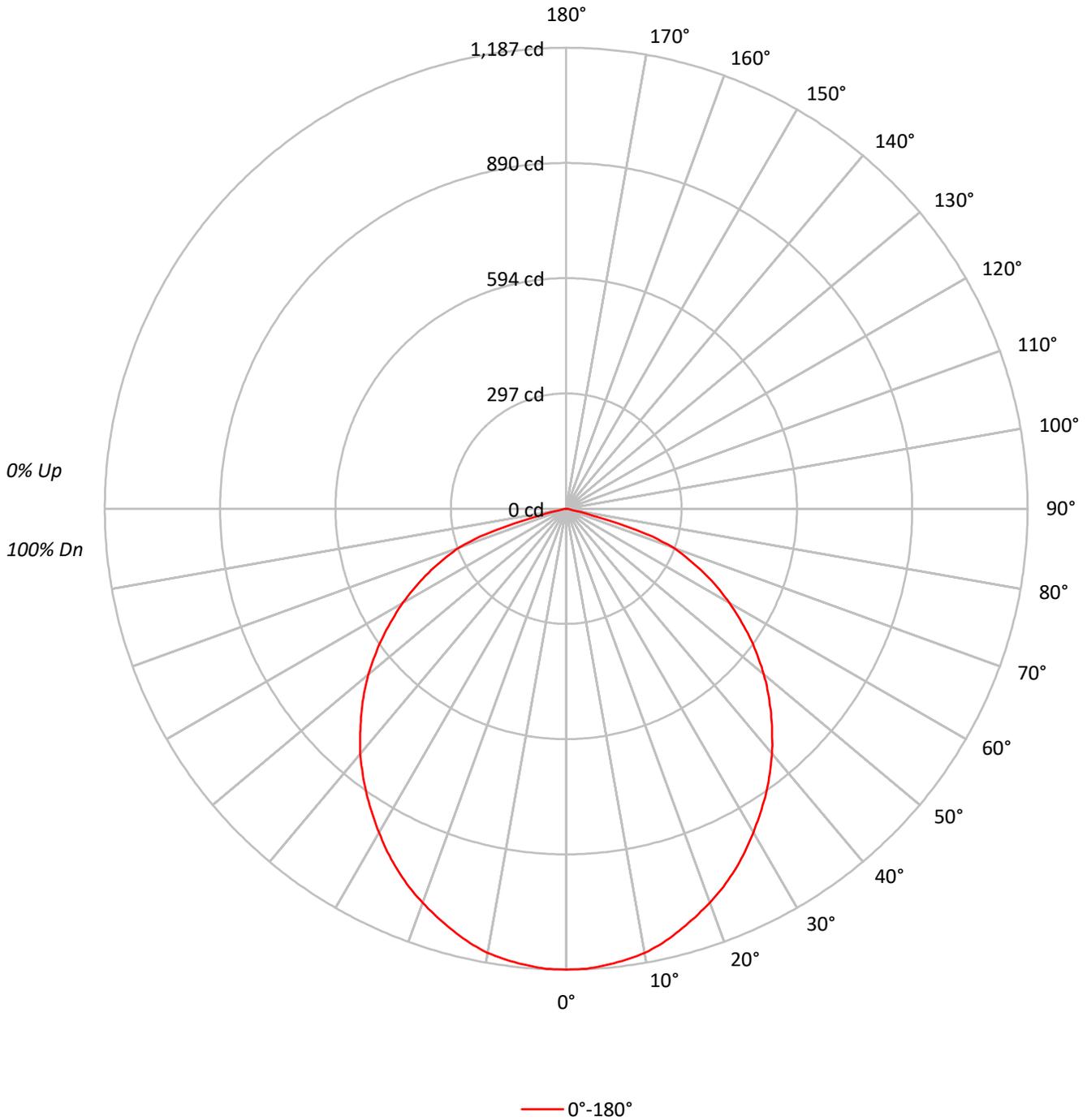
Lumens per Lamp: N/A
Luminaire Lumens: 3056.6 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5312
5°	5301
10°	5280
15°	5212
20°	5143
25°	5071
30°	4976
35°	4895
40°	4814
45°	4715
50°	4623
55°	4494
60°	4341
65°	4140
70°	3834
75°	1504
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4715 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	3.7
10°-20°	317.3	10.4
20°-30°	472.8	15.5
30°-40°	560.3	18.3
40°-50°	574.9	18.8
50°-60°	514.4	16.8
60°-70°	385.9	12.6
70°-80°	118.9	3.9
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°	902.2	29.5
0°-40°	1462.5	47.8
0°-60°	2551.8	83.5
0°-90°	3056.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3056.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1187	
5°	1180	112
15°	1125	317
25°	1027	473
35°	896	560
45°	745	575
55°	576	514
65°	391	386
75°	87	119
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1187
2.5°	1186
5°	1180
7.5°	1172
10°	1162
12.5°	1146
15°	1125
17.5°	1103
20°	1080
22.5°	1055
25°	1027
27.5°	996
30°	963
32.5°	929
35°	896
37.5°	860
40°	824
42.5°	784
45°	745
47.5°	705
50°	664
52.5°	620
55°	576
57.5°	530
60°	485
62.5°	438
65°	391
67.5°	342
70°	293
72.5°	217
75°	87
77.5°	4
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	17.56	19.15	17.92	19.46	19.78	17.56	19.15	17.92	19.46	19.78
	3H	19.31	20.73	19.68	21.06	21.42	19.31	20.73	19.68	21.06	21.42
	4H	19.50	20.84	19.90	21.19	21.57	19.50	20.84	19.90	21.19	21.57
	6H	19.44	20.68	19.86	21.05	21.44	19.44	20.68	19.86	21.05	21.44
	8H	19.41	20.59	19.84	20.98	21.38	19.41	20.59	19.84	20.98	21.38
	12H	19.38	20.51	19.81	20.89	21.32	19.38	20.51	19.81	20.89	21.32
4H	2H	18.19	19.53	18.59	19.88	20.26	18.19	19.53	18.59	19.88	20.26
	3H	20.11	21.22	20.52	21.61	22.01	20.11	21.22	20.52	21.61	22.01
	4H	20.29	21.28	20.72	21.70	22.14	20.29	21.28	20.72	21.70	22.14
	6H	20.24	21.10	20.69	21.54	22.00	20.24	21.10	20.69	21.54	22.00
	8H	20.20	21.00	20.66	21.44	21.91	20.20	21.00	20.66	21.44	21.91
	12H	20.17	20.89	20.65	21.36	21.84	20.17	20.89	20.65	21.36	21.84
8H	4H	20.33	21.13	20.79	21.57	22.04	20.33	21.13	20.79	21.57	22.04
	6H	20.26	20.91	20.75	21.40	21.88	20.26	20.91	20.75	21.40	21.88
	8H	20.21	20.80	20.73	21.31	21.79	20.21	20.80	20.73	21.31	21.79
	12H	20.19	20.70	20.70	21.19	21.76	20.19	20.70	20.70	21.19	21.76
12H	4H	20.30	21.01	20.78	21.49	21.96	20.30	21.01	20.78	21.49	21.96
	6H	20.21	20.80	20.72	21.31	21.79	20.21	20.80	20.72	21.31	21.79
	8H	20.19	20.70	20.70	21.19	21.76	20.19	20.70	20.70	21.19	21.76