

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: P980152

Luminaire Tested: PRLX-242-940-LL2-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980152  
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-242-940-LL2-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

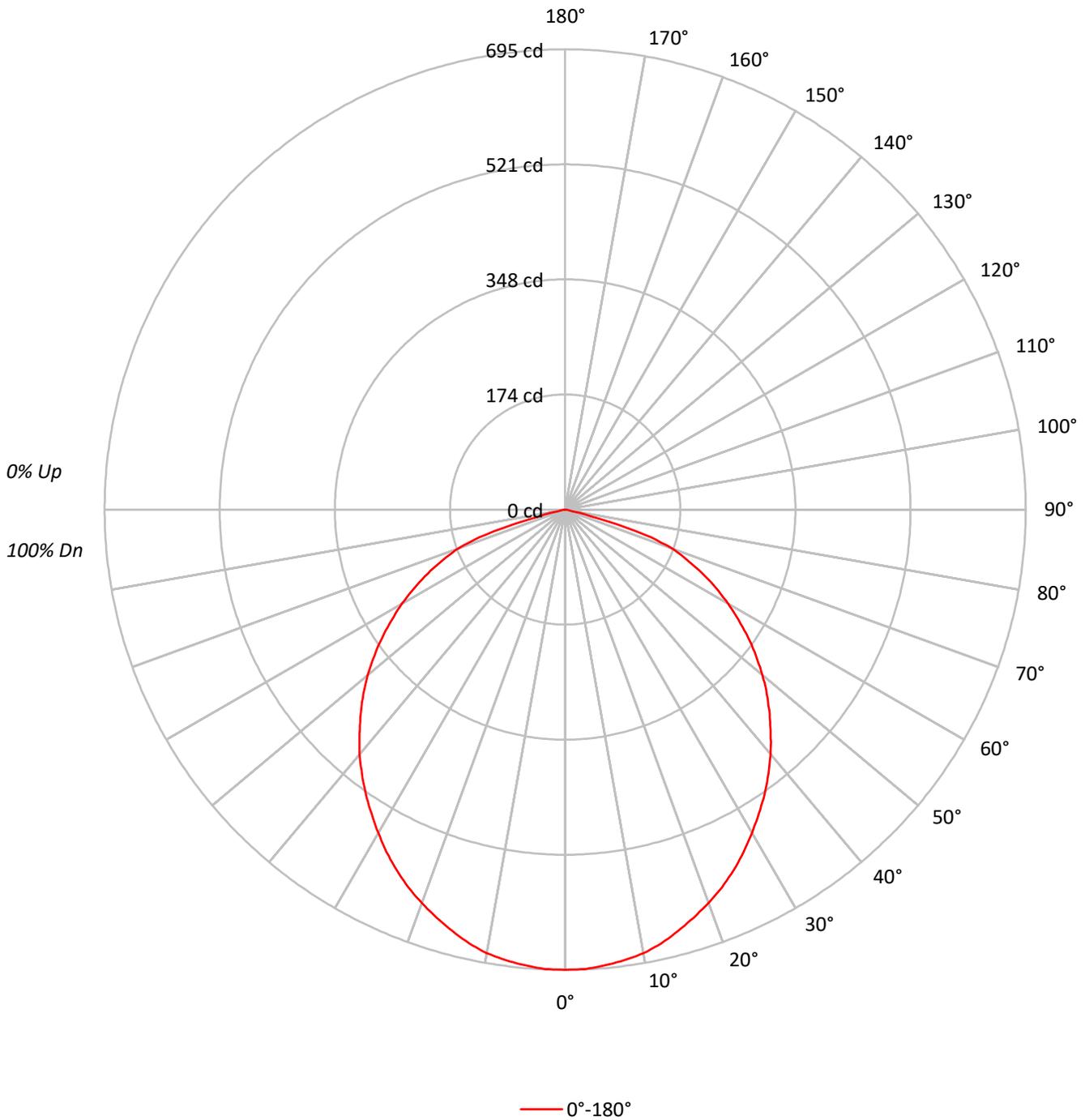
Lumens per Lamp: N/A  
Luminaire Lumens: 1789.6 lumens  
Efficiency: N/A  
Efficacy: 162.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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°	3110
5°	3104
10°	3091
15°	3052
20°	3011
25°	2969
30°	2913
35°	2866
40°	2819
45°	2761
50°	2707
55°	2631
60°	2542
65°	2424
70°	2245
75°	880
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2761 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	3.7
10°-20°	185.8	10.4
20°-30°	276.8	15.5
30°-40°	328.1	18.3
40°-50°	336.6	18.8
50°-60°	301.2	16.8
60°-70°	225.9	12.6
70°-80°	69.6	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°	528.2	29.5
0°-40°	856.3	47.8
0°-60°	1494.1	83.5
0°-90°	1789.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1789.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	695	
5°	691	66
15°	659	186
25°	601	277
35°	525	328
45°	436	337
55°	337	301
65°	229	226
75°	51	70
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	695.0
2.5°	694.4
5°	690.9
7.5°	686.2
10°	680.3
12.5°	671.0
15°	658.7
17.5°	645.8
20°	632.3
22.5°	617.7
25°	601.3
27.5°	583.2
30°	563.8
32.5°	543.9
35°	524.6
37.5°	503.5
40°	482.5
42.5°	459.0
45°	436.2
47.5°	412.8
50°	388.8
52.5°	363.0
55°	337.2
57.5°	310.3
60°	284.0
62.5°	256.4
65°	228.9
67.5°	200.2
70°	171.6
72.5°	127.1
75°	50.9
77.5°	2.3
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	15.70	17.29	16.06	17.60	17.92	15.70	17.29	16.06	17.60	17.92
	3H	17.45	18.87	17.82	19.20	19.56	17.45	18.87	17.82	19.20	19.56
	4H	17.64	18.98	18.04	19.33	19.71	17.64	18.98	18.04	19.33	19.71
	6H	17.58	18.82	18.00	19.19	19.58	17.58	18.82	18.00	19.19	19.58
	8H	17.55	18.73	17.98	19.12	19.52	17.55	18.73	17.98	19.12	19.52
	12H	17.52	18.65	17.95	19.03	19.46	17.52	18.65	17.95	19.03	19.46
4H	2H	16.33	17.67	16.73	18.02	18.40	16.33	17.67	16.73	18.02	18.40
	3H	18.25	19.36	18.66	19.75	20.15	18.25	19.36	18.66	19.75	20.15
	4H	18.43	19.42	18.86	19.84	20.28	18.43	19.42	18.86	19.84	20.28
	6H	18.38	19.24	18.83	19.68	20.14	18.38	19.24	18.83	19.68	20.14
	8H	18.34	19.14	18.80	19.58	20.05	18.34	19.14	18.80	19.58	20.05
	12H	18.31	19.03	18.79	19.51	19.98	18.31	19.03	18.79	19.51	19.98
8H	4H	18.47	19.27	18.93	19.71	20.18	18.47	19.27	18.93	19.71	20.18
	6H	18.40	19.05	18.89	19.54	20.02	18.40	19.05	18.89	19.54	20.02
	8H	18.35	18.94	18.87	19.45	19.93	18.35	18.94	18.87	19.45	19.93
	12H	18.33	18.84	18.84	19.33	19.90	18.33	18.84	18.84	19.33	19.90
12H	4H	18.44	19.15	18.92	19.63	20.10	18.44	19.15	18.92	19.63	20.10
	6H	18.35	18.94	18.87	19.45	19.93	18.35	18.94	18.87	19.45	19.93
	8H	18.33	18.84	18.84	19.33	19.90	18.33	18.84	18.84	19.33	19.90