

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: P980500

Luminaire Tested: PRLX-243-940-LL5-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-36)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-243-940-LL5-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

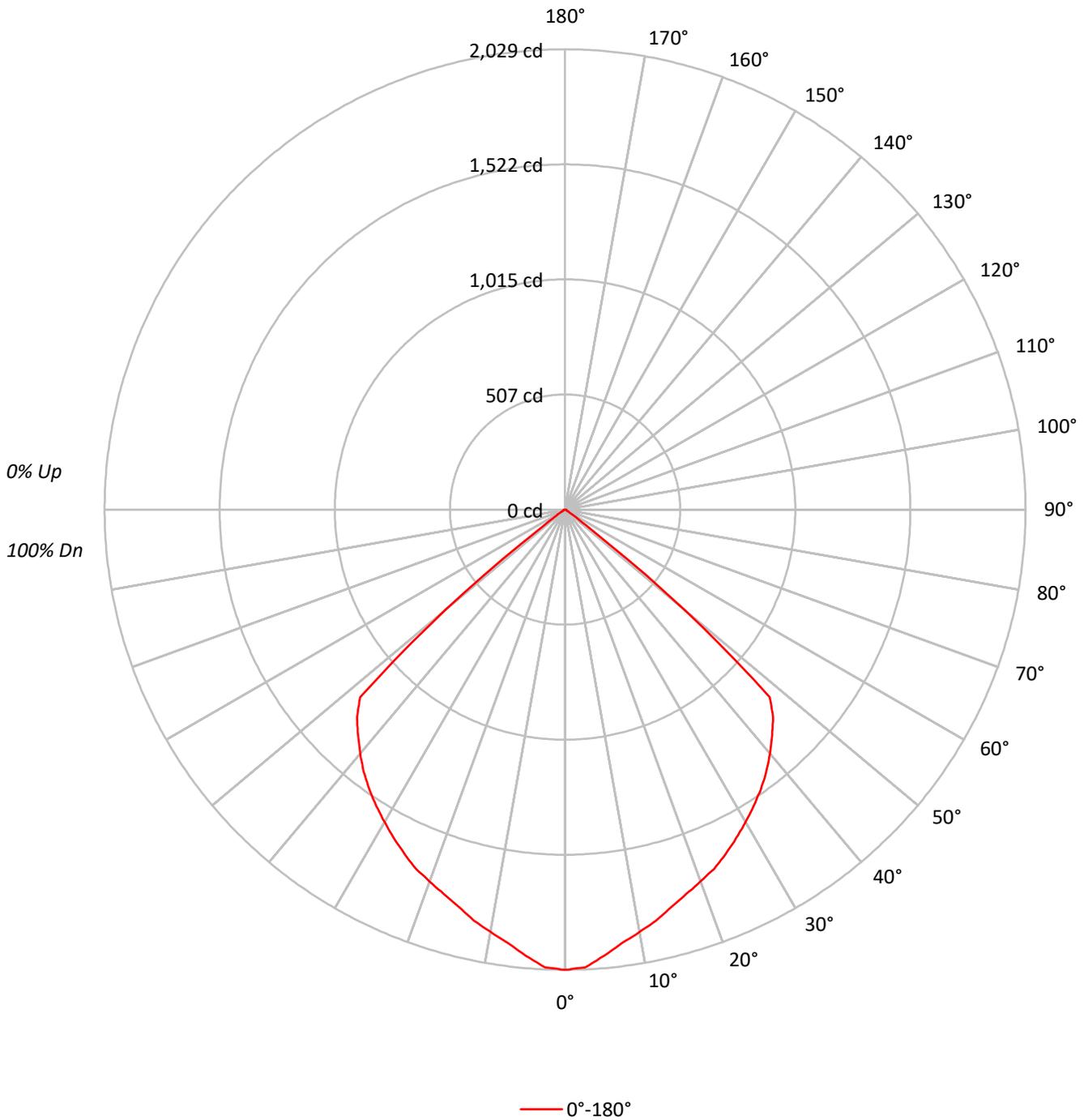
Lumens per Lamp: N/A  
Luminaire Lumens: 3489.7 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.5  
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



TEST NUMBER: P980500  
CATALOG NUMBER: PRLX-243-940-LL5-C-U-S-BLAK-X

### Luminous Intensity Polar Plot





TEST NUMBER: P980500

CATALOG NUMBER: PRLX-243-940-LL5-C-U-S-BLAK-X

**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	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	105	99	95	91	103	98	93	89	94	91	88		91	88	86		88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78		84	80	77		82	78	75	74
4	92	83	76	71	90	81	75	70	79	74	69		77	72	69		75	71	68	66
5	86	75	68	63	84	74	68	63	73	67	62		71	66	62		69	65	61	59
6	80	69	62	57	78	68	61	56	67	61	56		65	60	56		64	59	55	53
7	75	63	56	51	73	63	56	51	61	55	51		60	54	50		59	54	50	48
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54	49	45	44
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50	45	41	40
10	62	50	43	38	61	50	43	38	49	43	38		48	42	38		47	42	38	36

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	10010
5°	9780
10°	9473
15°	9258
20°	9158
25°	9116
30°	9062
35°	9057
40°	9044
45°	9043
50°	5242
55°	465
60°	70
65°	83
70°	102
75°	109
80°	80
85°	79

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9043 cd/sqm

TEST NUMBER: P980500

CATALOG NUMBER: PRLX-243-940-LL5-C-U-S-BLAK-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	5.3
10°-20°	512.5	14.7
20°-30°	771.9	22.1
30°-40°	941.0	27.0
40°-50°	945.7	27.1
50°-60°	118.1	3.4
60°-70°	7.0	0.2
70°-80°	5.8	0.2
80°-90°	1.9	0.1
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°	1470.2	42.1
0°-40°	2411.1	69.1
0°-60°	3474.9	99.6
0°-90°	3489.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2029	
5°	1975	186
15°	1812	512
25°	1674	772
35°	1504	941
45°	1296	946
55°	54	118
65°	7	7
75°	6	6
85°	1	2
90°	0	



TEST NUMBER: P980500

CATALOG NUMBER: PRLX-243-940-LL5-C-U-S-BLAK-X

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2028.8
2.5°	2020.2
5°	1974.7
7.5°	1927.7
10°	1890.8
12.5°	1855.2
15°	1812.5
17.5°	1776.9
20°	1744.2
22.5°	1714.3
25°	1674.5
27.5°	1633.2
30°	1590.6
32.5°	1547.9
35°	1503.8
37.5°	1456.8
40°	1404.2
42.5°	1350.1
45°	1296.1
47.5°	1223.5
50°	682.9
52.5°	129.5
55°	54.1
57.5°	17.1
60°	7.1
62.5°	7.1
65°	7.1
67.5°	7.1
70°	7.1
72.5°	7.1
75°	5.7
77.5°	4.3
80°	2.8
82.5°	2.8
85°	1.4
87.5°	1.4
90°	0.0



TEST NUMBER: P980500  
 CATALOG NUMBER: PRLX-243-940-LL5-C-U-S-BLAK-X

**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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00