

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: P980171

Luminaire Tested: PRLX-242-940-LL4-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980171  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-940-LL4-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

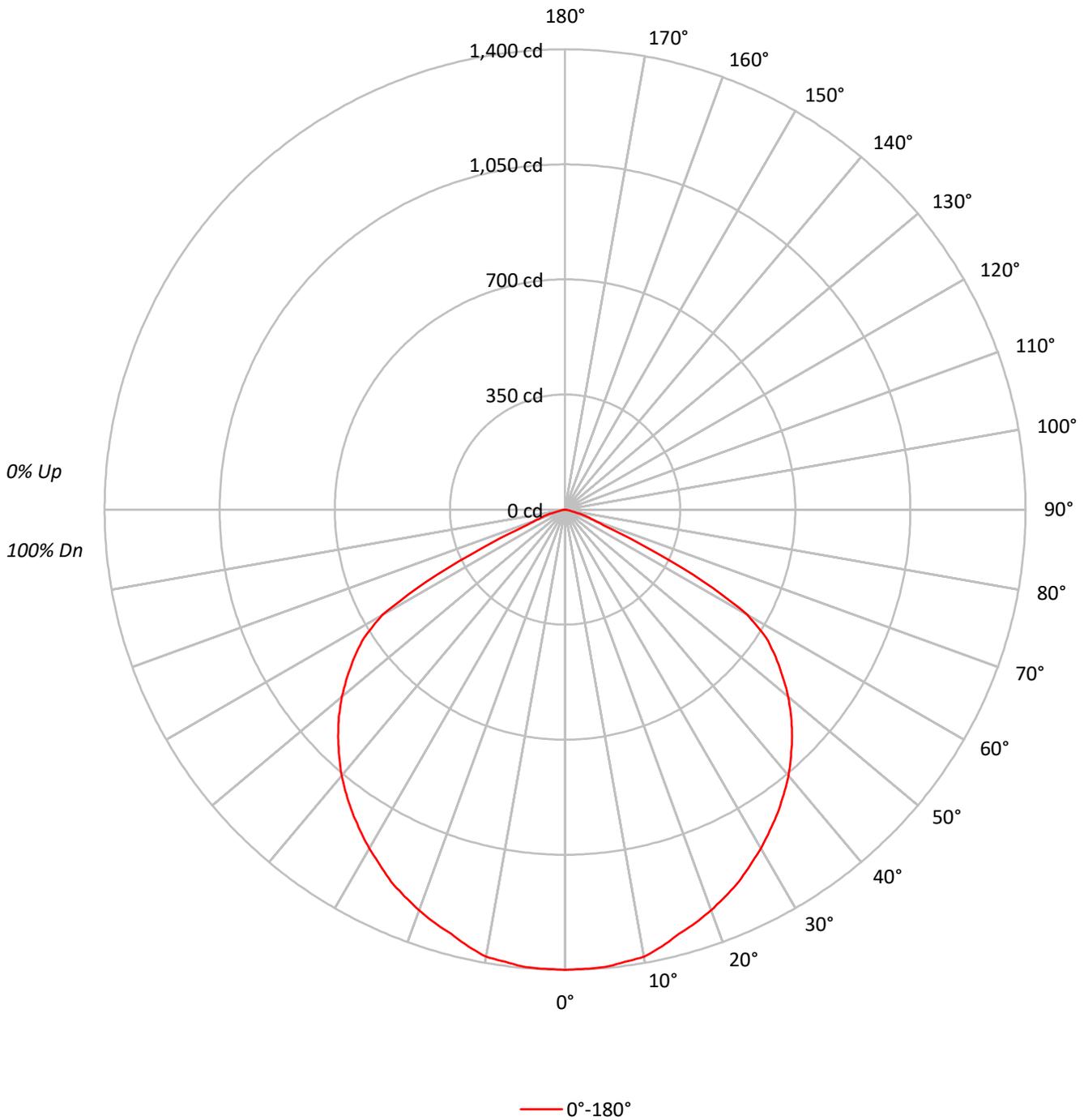
Lumens per Lamp: N/A  
Luminaire Lumens: 3587.7 lumens  
Efficiency: N/A  
Efficacy: 174.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.6  
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: P980171  
CATALOG NUMBER: PRLX-242-940-LL4-C-U-S-WHTE-X

### Luminous Intensity Polar Plot





TEST NUMBER: P980171

CATALOG NUMBER: PRLX-242-940-LL4-C-U-S-WHTE-X

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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	100	100	100	100	100	100	100	100	100	100																
	1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88	88	88	88	88	88	88	88	88																
	2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	75	75	75	75	75	75	75	75	75	75																
	3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64	64	64	64	64	64	64	64	64	64	64	64																
	4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56	56	56	56	56	56	56	56	56	56	56	56																
	5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48	48	48	48	48	48	48	48	48	48	48	48																
	6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42	42	42	42	42	42	42	42	42	42	42	42																
	7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37	37	37	37	37	37	37	37	37																
	8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33	33	33	33	33	33	33	33	33	33	33	33																
	9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30	30	30	30	30	30	30	30	30	30	30	30																
	10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27	27	27	27	27	27	27	27	27	27	27	27																

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

	0°
0°	6266
5°	6276
10°	6278
15°	6194
20°	6179
25°	6171
30°	6153
35°	6154
40°	6174
45°	6177
50°	6166
55°	6093
60°	5727
65°	2932
70°	1180
75°	557
80°	106
85°	159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6177 cd/sqm

TEST NUMBER: P980171

CATALOG NUMBER: PRLX-242-940-LL4-C-U-S-WHTE-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.7	3.7
10°-20°	378.3	10.5
20°-30°	575.5	16.0
30°-40°	705.2	19.7
40°-50°	752.5	21.0
50°-60°	693.9	19.3
60°-70°	305.5	8.5
70°-80°	40.9	1.1
80°-90°	3.1	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°	1086.5	30.3
0°-40°	1791.8	49.9
0°-60°	3238.2	90.3
0°-90°	3587.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3587.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1400	
5°	1397	133
15°	1337	378
25°	1250	576
35°	1126	705
45°	976	753
55°	781	694
65°	277	306
75°	32	41
85°	3	3
90°	0	

TEST NUMBER: P980171

CATALOG NUMBER: PRLX-242-940-LL4-C-U-S-WHTE-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1400.2
2.5°	1398.1
5°	1397.1
7.5°	1387.7
10°	1381.5
12.5°	1360.8
15°	1336.9
17.5°	1318.2
20°	1297.5
22.5°	1273.6
25°	1249.8
27.5°	1218.7
30°	1190.7
32.5°	1158.5
35°	1126.4
37.5°	1092.1
40°	1056.9
42.5°	1016.4
45°	976.0
47.5°	932.4
50°	885.7
52.5°	833.9
55°	781.0
57.5°	725.0
60°	639.9
62.5°	476.1
65°	276.9
67.5°	128.6
70°	90.2
72.5°	67.4
75°	32.2
77.5°	9.3
80°	4.1
82.5°	4.1
85°	3.1
87.5°	2.1
90°	0.0

TEST NUMBER: P980171  
 CATALOG NUMBER: PRLX-242-940-LL4-C-U-S-WHTE-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	19.21	20.76	19.58	21.08	21.39	19.21	20.76	19.58	21.08	21.39
	3H	19.26	20.64	19.64	20.96	21.33	19.26	20.64	19.64	20.96	21.33
	4H	19.23	20.51	19.63	20.86	21.24	19.23	20.51	19.63	20.86	21.24
	6H	19.17	20.35	19.58	20.72	21.11	19.17	20.35	19.58	20.72	21.11
	8H	19.13	20.26	19.56	20.65	21.05	19.13	20.26	19.56	20.65	21.05
	12H	19.10	20.18	19.53	20.56	20.99	19.10	20.18	19.53	20.56	20.99
4H	2H	19.31	20.59	19.71	20.94	21.32	19.31	20.59	19.71	20.94	21.32
	3H	19.40	20.45	19.81	20.85	21.25	19.40	20.45	19.81	20.85	21.25
	4H	19.36	20.30	19.80	20.71	21.15	19.36	20.30	19.80	20.71	21.15
	6H	19.31	20.11	19.76	20.56	21.02	19.31	20.11	19.76	20.56	21.02
	8H	19.26	20.01	19.73	20.46	20.93	19.26	20.01	19.73	20.46	20.93
	12H	19.23	19.90	19.71	20.38	20.85	19.23	19.90	19.71	20.38	20.85
8H	4H	19.28	20.03	19.74	20.47	20.94	19.28	20.03	19.74	20.47	20.94
	6H	19.20	19.81	19.69	20.30	20.78	19.20	19.81	19.69	20.30	20.78
	8H	19.14	19.70	19.66	20.21	20.70	19.14	19.70	19.66	20.21	20.70
	12H	19.11	19.60	19.62	20.09	20.66	19.11	19.60	19.62	20.09	20.66
12H	4H	19.24	19.91	19.73	20.39	20.86	19.24	19.91	19.73	20.39	20.86
	6H	19.14	19.70	19.66	20.21	20.70	19.14	19.70	19.66	20.21	20.70
	8H	19.11	19.60	19.62	20.09	20.66	19.11	19.60	19.62	20.09	20.66