

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: P980141

Luminaire Tested: PRLX-242-940-LL1-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980141  
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-LL1-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: -

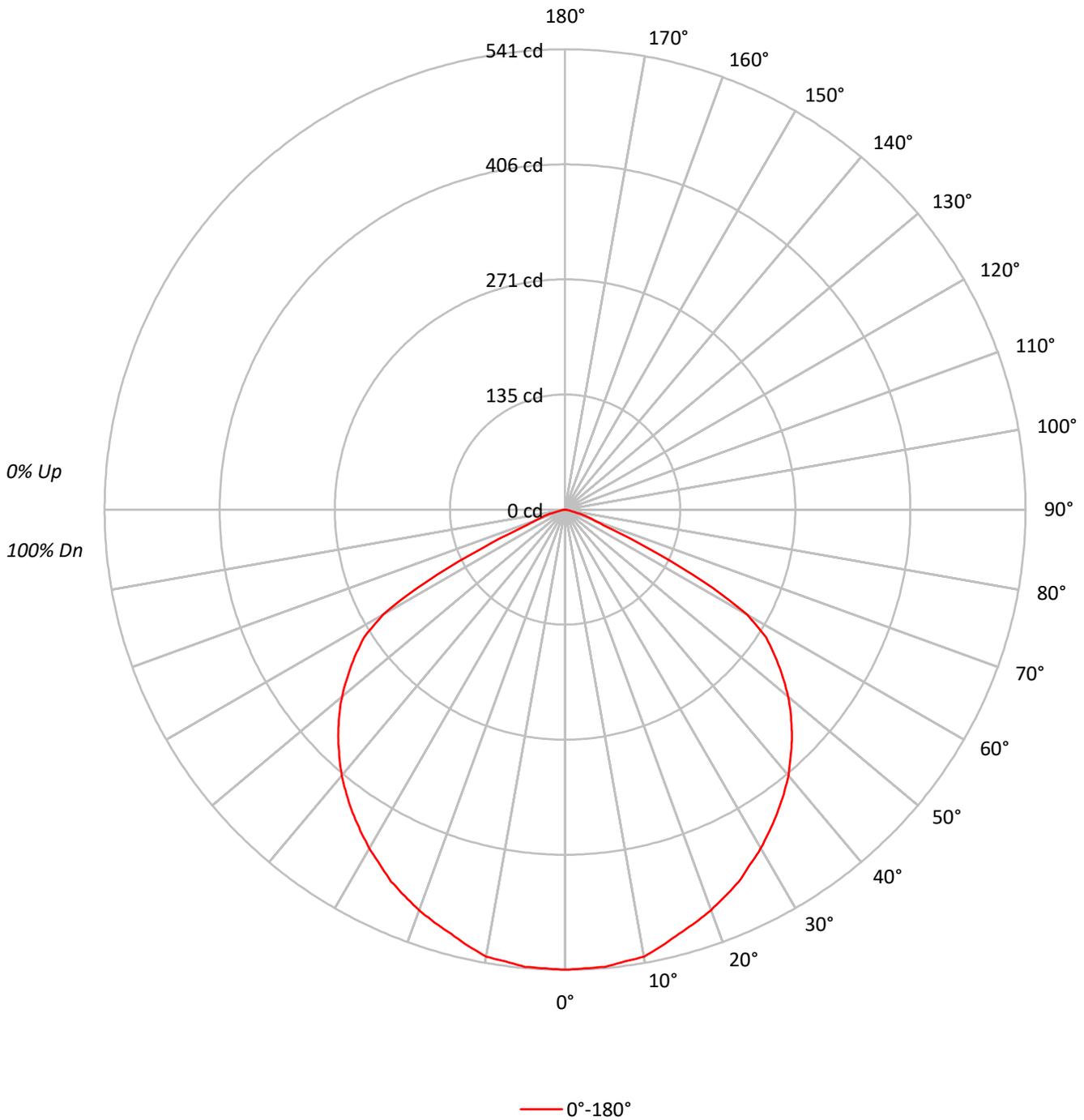
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1385.5 lumens  
Efficiency: N/A  
Efficacy: 184.7 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): 7.5  
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: P980141  
CATALOG NUMBER: PRLX-242-940-LL1-C-U-S-WHTE-X

### Luminous Intensity Polar Plot





TEST NUMBER: P980141

CATALOG NUMBER: PRLX-242-940-LL1-C-U-S-WHTE-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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

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

	0°
0°	2420
5°	2424
10°	2424
15°	2392
20°	2386
25°	2383
30°	2376
35°	2376
40°	2385
45°	2385
50°	2382
55°	2353
60°	2212
65°	1132
70°	455
75°	214
80°	41
85°	62

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2385 cd/sqm

TEST NUMBER: P980141

CATALOG NUMBER: PRLX-242-940-LL1-C-U-S-WHTE-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	3.7
10°-20°	146.1	10.5
20°-30°	222.3	16.0
30°-40°	272.4	19.7
40°-50°	290.6	21.0
50°-60°	268.0	19.3
60°-70°	118.0	8.5
70°-80°	15.8	1.1
80°-90°	1.2	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°	419.6	30.3
0°-40°	692.0	49.9
0°-60°	1250.6	90.3
0°-90°	1385.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1385.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	541	
5°	540	51
15°	516	146
25°	483	222
35°	435	272
45°	377	291
55°	302	268
65°	107	118
75°	12	16
85°	1	1
90°	0	

TEST NUMBER: P980141

CATALOG NUMBER: PRLX-242-940-LL1-C-U-S-WHTE-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	540.7
2.5°	539.9
5°	539.5
7.5°	535.9
10°	533.5
12.5°	525.5
15°	516.3
17.5°	509.1
20°	501.1
22.5°	491.9
25°	482.7
27.5°	470.6
30°	459.8
32.5°	447.4
35°	435.0
37.5°	421.8
40°	408.2
42.5°	392.5
45°	376.9
47.5°	360.1
50°	342.1
52.5°	322.0
55°	301.6
57.5°	280.0
60°	247.1
62.5°	183.8
65°	106.9
67.5°	49.7
70°	34.8
72.5°	26.0
75°	12.4
77.5°	3.6
80°	1.6
82.5°	1.6
85°	1.2
87.5°	0.8
90°	0.0



TEST NUMBER: P980141  
 CATALOG NUMBER: PRLX-242-940-LL1-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	15.91	17.46	16.27	17.77	18.09	15.91	17.46	16.27	17.77	18.09
	3H	15.96	17.33	16.33	17.66	18.02	15.96	17.33	16.33	17.66	18.02
	4H	15.92	17.21	16.32	17.56	17.93	15.92	17.21	16.32	17.56	17.93
	6H	15.86	17.04	16.27	17.41	17.80	15.86	17.04	16.27	17.41	17.80
	8H	15.83	16.95	16.25	17.34	17.74	15.83	16.95	16.25	17.34	17.74
	12H	15.80	16.87	16.23	17.25	17.68	15.80	16.87	16.23	17.25	17.68
4H	2H	16.00	17.29	16.40	17.64	18.02	16.00	17.29	16.40	17.64	18.02
	3H	16.09	17.14	16.50	17.54	17.94	16.09	17.14	16.50	17.54	17.94
	4H	16.06	16.99	16.49	17.41	17.85	16.06	16.99	16.49	17.41	17.85
	6H	16.00	16.81	16.46	17.25	17.71	16.00	16.81	16.46	17.25	17.71
	8H	15.96	16.71	16.42	17.15	17.62	15.96	16.71	16.42	17.15	17.62
	12H	15.92	16.59	16.41	17.07	17.54	15.92	16.59	16.41	17.07	17.54
8H	4H	15.97	16.72	16.43	17.17	17.63	15.97	16.72	16.43	17.17	17.63
	6H	15.89	16.51	16.39	17.00	17.48	15.89	16.51	16.39	17.00	17.48
	8H	15.84	16.39	16.35	16.90	17.39	15.84	16.39	16.35	16.90	17.39
	12H	15.80	16.30	16.31	16.79	17.35	15.80	16.30	16.31	16.79	17.35
12H	4H	15.94	16.61	16.42	17.08	17.56	15.94	16.61	16.42	17.08	17.56
	6H	15.84	16.39	16.35	16.90	17.39	15.84	16.39	16.35	16.90	17.39
	8H	15.80	16.29	16.31	16.79	17.35	15.80	16.29	16.31	16.79	17.35