

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: P980212

Luminaire Tested: PRLX-242-940-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980212
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-LL8-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

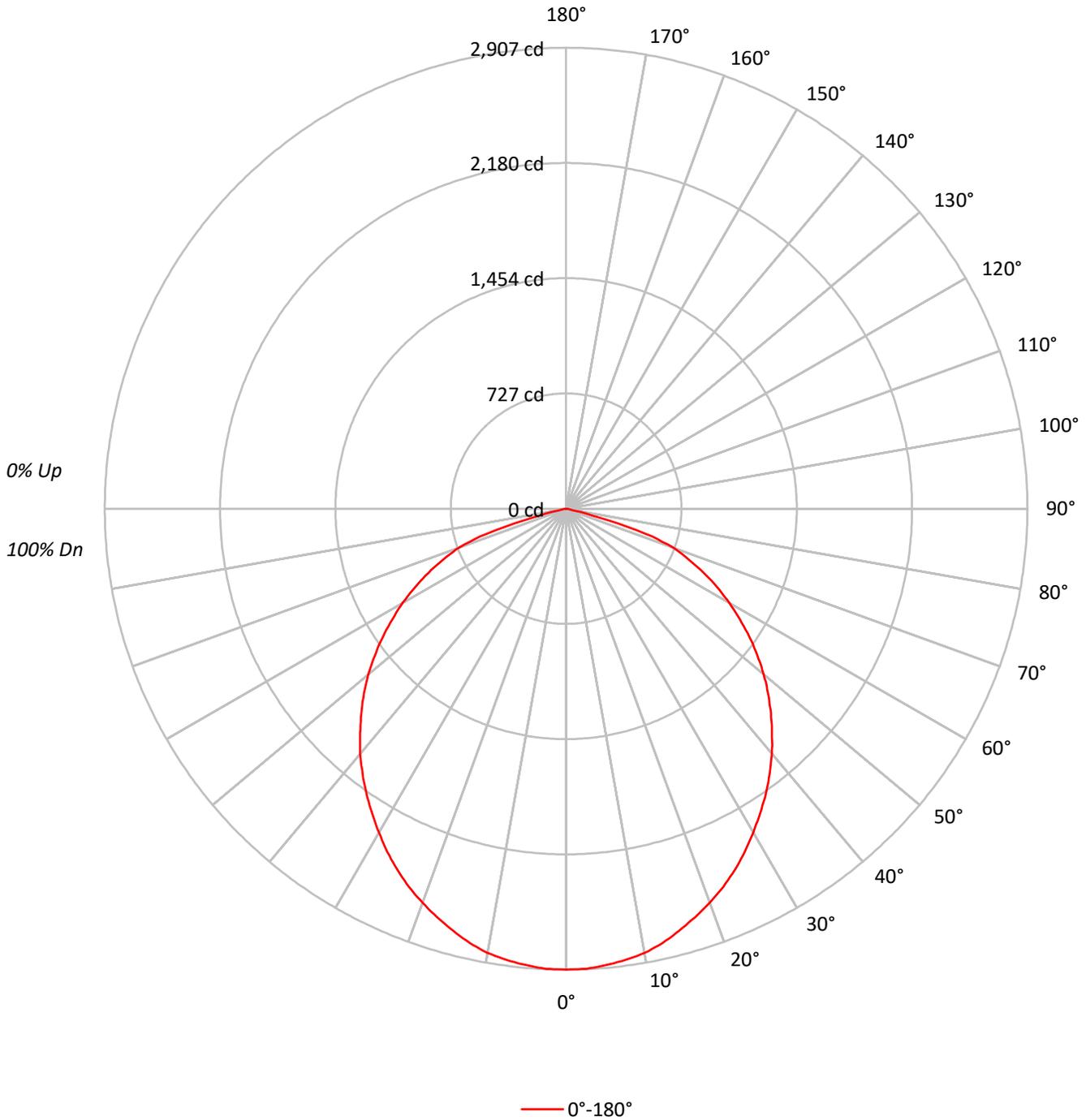
Lumens per Lamp: N/A
Luminaire Lumens: 7485.8 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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: P980212
CATALOG NUMBER: PRLX-242-940-LL8-F-U-S-BLAK-X

Luminous Intensity Polar Plot





TEST NUMBER: P980212

CATALOG NUMBER: PRLX-242-940-LL8-F-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	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°	13009
5°	12982
10°	12932
15°	12765
20°	12596
25°	12419
30°	12187
35°	11988
40°	11789
45°	11547
50°	11322
55°	11006
60°	10631
65°	10140
70°	9389
75°	3685
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11547 cd/sqm



TEST NUMBER: P980212

CATALOG NUMBER: PRLX-242-940-LL8-F-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.5	3.7
10°-20°	777.2	10.4
20°-30°	1157.9	15.5
30°-40°	1372.2	18.3
40°-50°	1407.9	18.8
50°-60°	1259.9	16.8
60°-70°	945.1	12.6
70°-80°	291.1	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°	2209.5	29.5
0°-40°	3581.7	47.8
0°-60°	6249.6	83.5
0°-90°	7485.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7485.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2907	
5°	2890	274
15°	2755	777
25°	2515	1158
35°	2194	1372
45°	1824	1408
55°	1411	1260
65°	958	945
75°	213	291
85°	0	0
90°	0	



TEST NUMBER: P980212

CATALOG NUMBER: PRLX-242-940-LL8-F-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	2907.0
2.5°	2904.6
5°	2889.9
7.5°	2870.3
10°	2845.8
12.5°	2806.6
15°	2755.2
17.5°	2701.3
20°	2645.0
22.5°	2583.7
25°	2515.2
27.5°	2439.3
30°	2358.4
32.5°	2275.2
35°	2194.3
37.5°	2106.2
40°	2018.0
42.5°	1920.1
45°	1824.5
47.5°	1726.6
50°	1626.2
52.5°	1518.4
55°	1410.7
57.5°	1298.0
60°	1187.8
62.5°	1072.7
65°	957.6
67.5°	837.6
70°	717.6
72.5°	531.4
75°	213.1
77.5°	9.8
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



TEST NUMBER: P980212
 CATALOG NUMBER: PRLX-242-940-LL8-F-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	20.67	22.26	21.03	22.57	22.89	20.67	22.26	21.03	22.57	22.89
	3H	22.42	23.85	22.80	24.17	24.53	22.42	23.85	22.80	24.17	24.53
	4H	22.62	23.96	23.01	24.30	24.68	22.62	23.96	23.01	24.30	24.68
	6H	22.56	23.79	22.97	24.16	24.55	22.56	23.79	22.97	24.16	24.55
	8H	22.52	23.70	22.95	24.09	24.49	22.52	23.70	22.95	24.09	24.49
	12H	22.49	23.62	22.92	24.00	24.43	22.49	23.62	22.92	24.00	24.43
4H	2H	21.30	22.64	21.70	22.99	23.37	21.30	22.64	21.70	22.99	23.37
	3H	23.22	24.33	23.63	24.73	25.13	23.22	24.33	23.63	24.73	25.13
	4H	23.40	24.40	23.83	24.81	25.25	23.40	24.40	23.83	24.81	25.25
	6H	23.35	24.21	23.81	24.65	25.11	23.35	24.21	23.81	24.65	25.11
	8H	23.31	24.11	23.77	24.56	25.02	23.31	24.11	23.77	24.56	25.02
	12H	23.29	24.00	23.77	24.48	24.95	23.29	24.00	23.77	24.48	24.95
8H	4H	23.44	24.24	23.90	24.68	25.15	23.44	24.24	23.90	24.68	25.15
	6H	23.37	24.02	23.87	24.51	24.99	23.37	24.02	23.87	24.51	24.99
	8H	23.33	23.91	23.84	24.42	24.91	23.33	23.91	23.84	24.42	24.91
	12H	23.30	23.81	23.81	24.30	24.87	23.30	23.81	23.81	24.30	24.87
12H	4H	23.41	24.13	23.89	24.60	25.07	23.41	24.13	23.89	24.60	25.07
	6H	23.32	23.91	23.84	24.42	24.91	23.32	23.91	23.84	24.42	24.91
	8H	23.30	23.81	23.81	24.30	24.87	23.30	23.81	23.81	24.30	24.87