

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: P980130

Luminaire Tested: PRLX-242-935-LL8-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-935-LL8-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

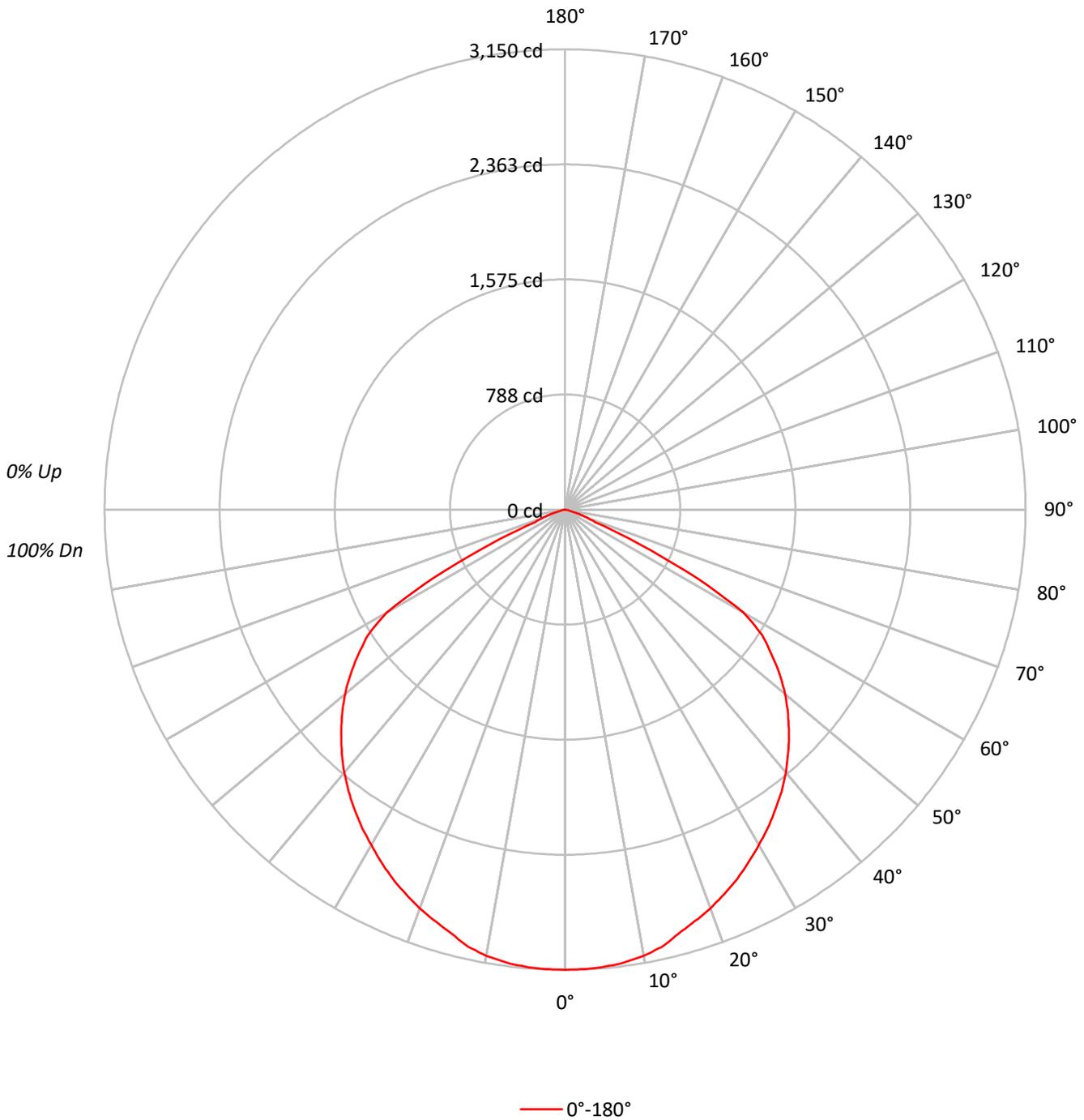
Lumens per Lamp: N/A
Luminaire Lumens: 7893.6 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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: P980130
CATALOG NUMBER: PRLX-242-935-LL8-C-U-S-BLAK-X

Luminous Intensity Polar Plot





TEST NUMBER: P980130

CATALOG NUMBER: PRLX-242-935-LL8-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	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	
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88	
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76			76	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65			65	
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56			56	
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49	
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43			43	
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38			38	
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34			34	
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30			30	
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27			27	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14097
5°	14108
10°	14089
15°	13916
20°	13832
25°	13770
30°	13702
35°	13700
40°	13725
45°	13704
50°	13678
55°	13449
60°	12596
65°	5876
70°	1977
75°	612
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13704 cd/sqm

TEST NUMBER: P980130

CATALOG NUMBER: PRLX-242-935-LL8-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.5	3.8
10°-20°	849.2	10.8
20°-30°	1285.0	16.3
30°-40°	1570.5	19.9
40°-50°	1670.8	21.2
50°-60°	1533.4	19.4
60°-70°	629.3	8.0
70°-80°	56.8	0.7
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°	2432.8	30.8
0°-40°	4003.3	50.7
0°-60°	7207.5	91.3
0°-90°	7893.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7893.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3150	
5°	3140	299
15°	3004	849
25°	2789	1285
35°	2508	1571
45°	2165	1671
55°	1724	1533
65°	555	629
75°	35	57
85°	0	0
90°	0	



TEST NUMBER: P980130

CATALOG NUMBER: PRLX-242-935-LL8-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

	0°
0°	3150.0
2.5°	3147.6
5°	3140.5
7.5°	3126.3
10°	3100.4
12.5°	3064.9
15°	3003.6
17.5°	2954.0
20°	2904.4
22.5°	2847.7
25°	2788.7
27.5°	2720.2
30°	2651.7
32.5°	2583.2
35°	2507.7
37.5°	2432.1
40°	2349.5
42.5°	2259.7
45°	2165.3
47.5°	2068.5
50°	1964.6
52.5°	1848.9
55°	1723.7
57.5°	1598.6
60°	1407.3
62.5°	1015.4
65°	554.9
67.5°	222.0
70°	151.1
72.5°	103.9
75°	35.4
77.5°	2.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



TEST NUMBER: P980130
 CATALOG NUMBER: PRLX-242-935-LL8-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	21.98	23.52	22.35	23.83	24.15	21.98	23.52	22.35	23.83	24.15
	3H	21.97	23.33	22.35	23.66	24.02	21.97	23.33	22.35	23.66	24.02
	4H	21.92	23.19	22.32	23.54	23.92	21.92	23.19	22.32	23.54	23.92
	6H	21.85	23.02	22.27	23.39	23.78	21.85	23.02	22.27	23.39	23.78
	8H	21.82	22.93	22.25	23.32	23.72	21.82	22.93	22.25	23.32	23.72
	12H	21.79	22.85	22.22	23.23	23.66	21.79	22.85	22.22	23.23	23.66
4H	2H	22.04	23.31	22.44	23.66	24.04	22.04	23.31	22.44	23.66	24.04
	3H	22.05	23.09	22.46	23.49	23.89	22.05	23.09	22.46	23.49	23.89
	4H	21.99	22.91	22.43	23.33	23.77	21.99	22.91	22.43	23.33	23.77
	6H	21.93	22.73	22.39	23.17	23.63	21.93	22.73	22.39	23.17	23.63
	8H	21.89	22.63	22.35	23.07	23.54	21.89	22.63	22.35	23.07	23.54
	12H	21.85	22.51	22.33	22.99	23.46	21.85	22.51	22.33	22.99	23.46
8H	4H	21.89	22.63	22.36	23.08	23.55	21.89	22.63	22.36	23.08	23.55
	6H	21.81	22.42	22.31	22.91	23.39	21.81	22.42	22.31	22.91	23.39
	8H	21.75	22.30	22.27	22.81	23.30	21.75	22.30	22.27	22.81	23.30
	12H	21.72	22.20	22.23	22.69	23.26	21.72	22.20	22.23	22.69	23.26
12H	4H	21.86	22.52	22.34	23.00	23.47	21.86	22.52	22.34	23.00	23.47
	6H	21.75	22.30	22.27	22.81	23.30	21.75	22.30	22.27	22.81	23.30
	8H	21.72	22.20	22.23	22.69	23.26	21.72	22.20	22.23	22.69	23.26