

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980070

Luminaire Tested: PRLX-242-935-18L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980070
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-242-935-18L-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

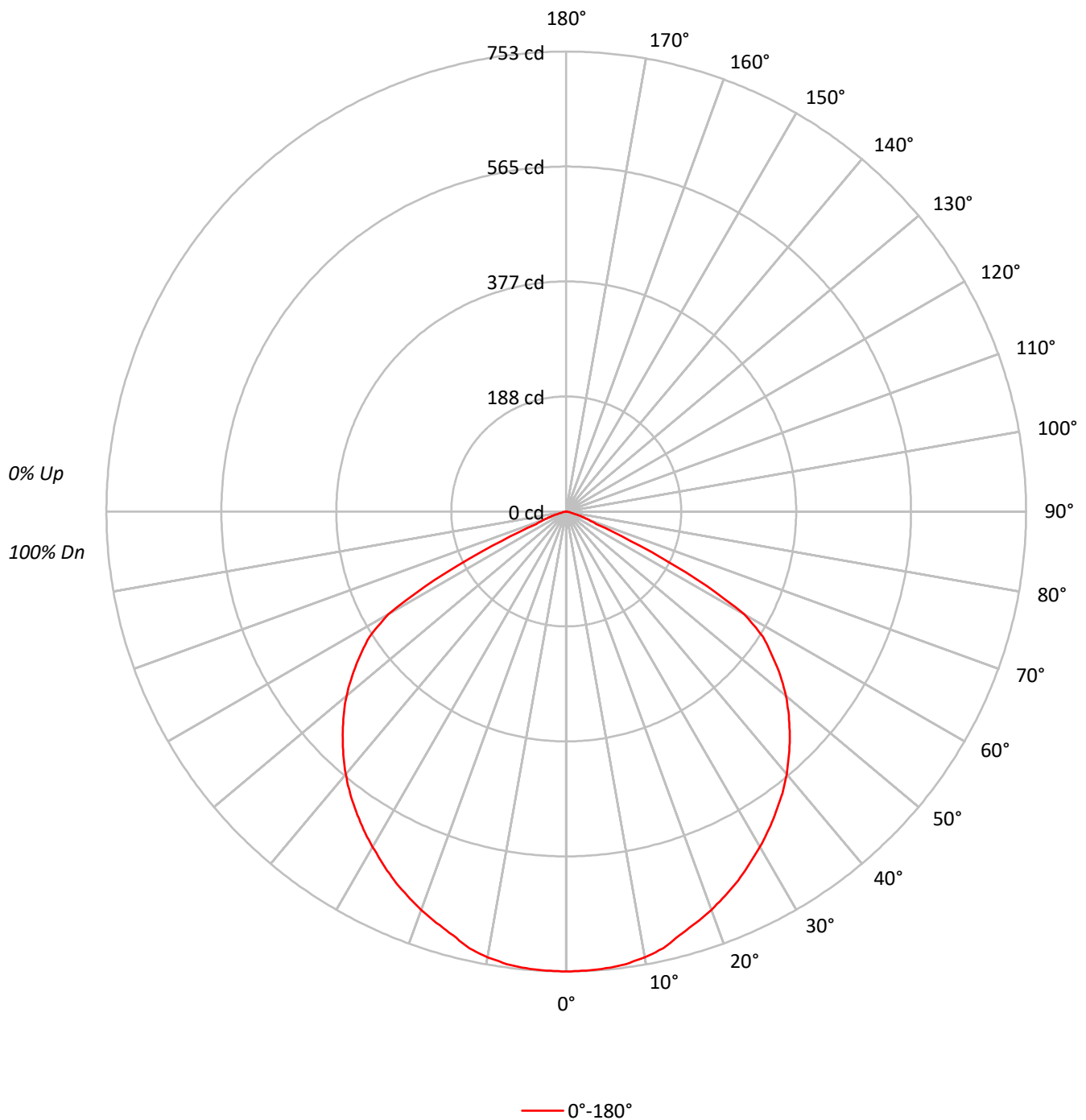
Lumens per Lamp: N/A
Luminaire Lumens: 1887.2 lumens
Efficiency: N/A
Efficacy: 171.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P980070

CATALOG NUMBER: PRLX-242-935-18L-C-U-S-BLAK-X

Luminous Intensity Polar Plot



TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-18L-C-U-S-BLAK-X

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3370
5°	3373
10°	3368
15°	3327
20°	3307
25°	3292
30°	3276
35°	3275
40°	3281
45°	3276
50°	3270
55°	3215
60°	3012
65°	1405
70°	472
75°	147
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3276 cd/sqm

TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-18L-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	3.8
10°-20°	203.0	10.8
20°-30°	307.2	16.3
30°-40°	375.5	19.9
40°-50°	399.4	21.2
50°-60°	366.6	19.4
60°-70°	150.5	8.0
70°-80°	13.6	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°	581.6	30.8
0°-40°	957.1	50.7
0°-60°	1723.1	91.3
0°-90°	1887.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1887.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	753	
5°	751	71
15°	718	203
25°	667	307
35°	600	375
45°	518	399
55°	412	367
65°	133	150
75°	8	14
85°	0	0
90°	0	

TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-18L-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	753.1
2.5°	752.5
5°	750.8
7.5°	747.4
10°	741.2
12.5°	732.7
15°	718.1
17.5°	706.2
20°	694.4
22.5°	680.8
25°	666.7
27.5°	650.3
30°	634.0
32.5°	617.6
35°	599.5
37.5°	581.5
40°	561.7
42.5°	540.2
45°	517.7
47.5°	494.5
50°	469.7
52.5°	442.0
55°	412.1
57.5°	382.2
60°	336.5
62.5°	242.7
65°	132.7
67.5°	53.1
70°	36.1
72.5°	24.8
75°	8.5
77.5°	0.6
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-18L-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	17.01	18.55	17.38	18.86	19.18	17.01	18.55	17.38	18.86	19.18
	3H	17.00	18.36	17.37	18.69	19.05	17.00	18.36	17.37	18.69	19.05
	4H	16.95	18.22	17.35	18.57	18.95	16.95	18.22	17.35	18.57	18.95
	6H	16.88	18.05	17.30	18.42	18.81	16.88	18.05	17.30	18.42	18.81
	8H	16.85	17.96	17.27	18.35	18.75	16.85	17.96	17.27	18.35	18.75
	12H	16.82	17.88	17.25	18.26	18.69	16.82	17.88	17.25	18.26	18.69
4H	2H	17.07	18.34	17.47	18.69	19.07	17.07	18.34	17.47	18.69	19.07
	3H	17.08	18.11	17.49	18.51	18.92	17.08	18.11	17.49	18.51	18.92
	4H	17.02	17.94	17.45	18.36	18.80	17.02	17.94	17.45	18.36	18.80
	6H	16.96	17.75	17.42	18.20	18.66	16.96	17.75	17.42	18.20	18.66
	8H	16.91	17.66	17.38	18.10	18.57	16.91	17.66	17.38	18.10	18.57
	12H	16.88	17.54	17.36	18.02	18.49	16.88	17.54	17.36	18.02	18.49
8H	4H	16.92	17.66	17.39	18.11	18.58	16.92	17.66	17.39	18.11	18.58
	6H	16.84	17.44	17.34	17.94	18.42	16.84	17.44	17.34	17.94	18.42
	8H	16.78	17.33	17.30	17.84	18.33	16.78	17.33	17.30	17.84	18.33
	12H	16.74	17.23	17.26	17.72	18.29	16.74	17.23	17.26	17.72	18.29
12H	4H	16.89	17.55	17.37	18.03	18.50	16.89	17.55	17.37	18.03	18.50
	6H	16.78	17.33	17.30	17.84	18.33	16.78	17.33	17.30	17.84	18.33
	8H	16.74	17.23	17.26	17.72	18.29	16.74	17.23	17.26	17.72	18.29