

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: P980150

Luminaire Tested: PRLX-242-940-18L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980150
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-242-940-18L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

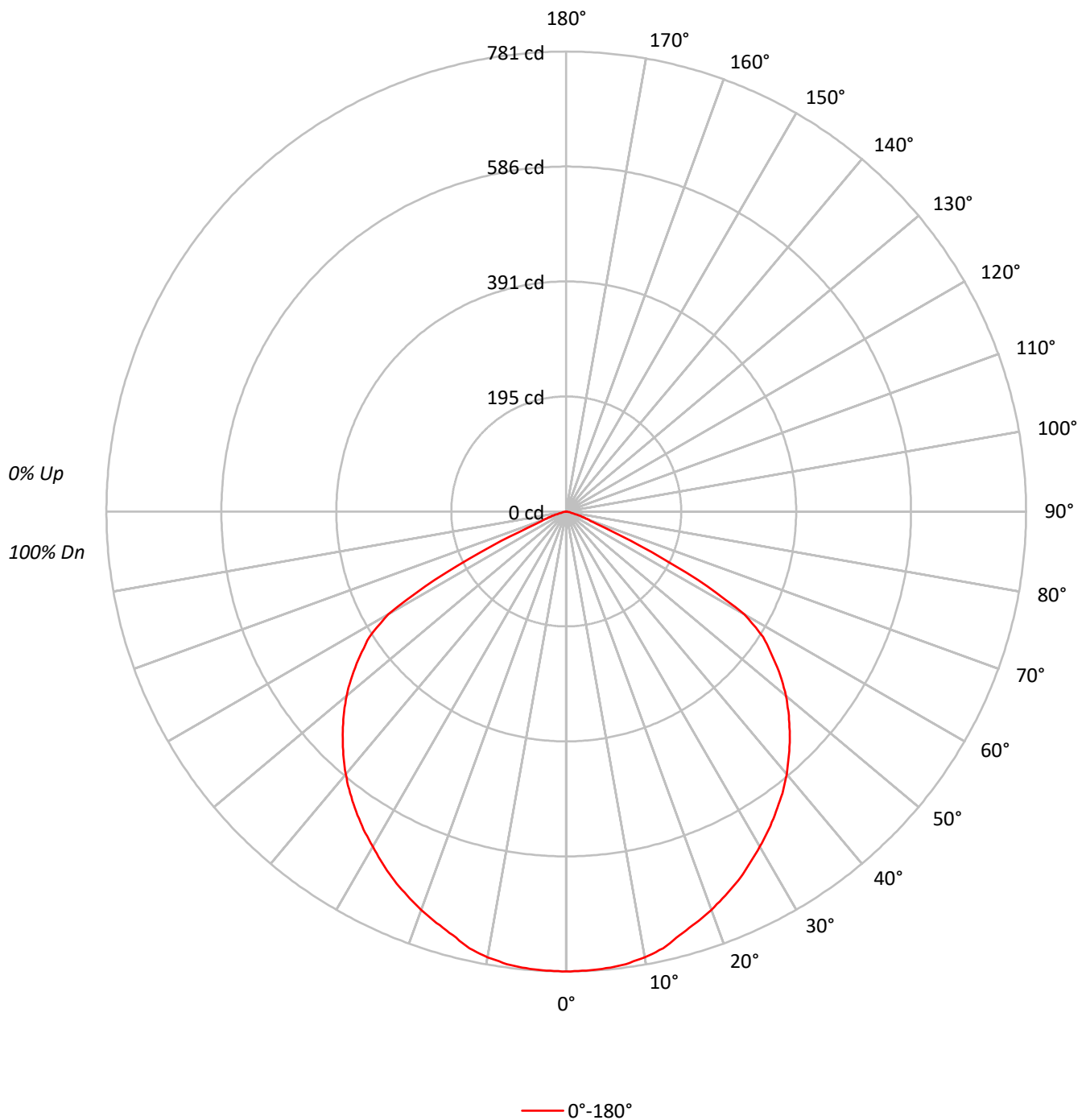
Lumens per Lamp: N/A
Luminaire Lumens: 1957.3 lumens
Efficiency: N/A
Efficacy: 177.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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: P980150

CATALOG NUMBER: PRLX-242-940-18L-C-U-S-BLAK-X

Luminous Intensity Polar Plot



TEST NUMBER: P980150

CATALOG NUMBER: PRLX-242-940-18L-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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		88
2	102	95	89	84	100	93	88	83	90	85	81		86	83	79		76
3	94	84	77	71	91	83	76	71	80	74	69		77	72	68		65
4	86	75	67	61	84	74	66	61	71	65	60		69	63	59		56
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		49
6	73	61	52	46	71	60	52	46	58	51	46		56	50	45		43
7	68	55	47	41	66	54	46	41	53	46	40		51	45	40		38
8	63	50	42	36	62	49	42	36	48	41	36		47	41	36		34
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		30
10	55	42	35	30	54	42	35	30	41	34	29		40	34	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3496
5°	3498
10°	3494
15°	3451
20°	3430
25°	3414
30°	3398
35°	3397
40°	3403
45°	3398
50°	3391
55°	3335
60°	3124
65°	1457
70°	491
75°	152
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3398 cd/sqm

TEST NUMBER: P980150

CATALOG NUMBER: PRLX-242-940-18L-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	3.8
10°-20°	210.6	10.8
20°-30°	318.6	16.3
30°-40°	389.4	19.9
40°-50°	414.3	21.2
50°-60°	380.2	19.4
60°-70°	156.0	8.0
70°-80°	14.1	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°	603.2	30.8
0°-40°	992.7	50.7
0°-60°	1787.2	91.3
0°-90°	1957.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1957.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	781	
5°	779	74
15°	745	211
25°	692	319
35°	622	389
45°	537	414
55°	427	380
65°	138	156
75°	9	14
85°	0	0
90°	0	

TEST NUMBER: P980150

CATALOG NUMBER: PRLX-242-940-18L-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	781.1
2.5°	780.5
5°	778.7
7.5°	775.2
10°	768.8
12.5°	760.0
15°	744.8
17.5°	732.5
20°	720.2
22.5°	706.1
25°	691.5
27.5°	674.5
30°	657.5
32.5°	640.5
35°	621.8
37.5°	603.1
40°	582.6
42.5°	560.3
45°	536.9
47.5°	512.9
50°	487.1
52.5°	458.4
55°	427.4
57.5°	396.4
60°	349.0
62.5°	251.8
65°	137.6
67.5°	55.0
70°	37.5
72.5°	25.8
75°	8.8
77.5°	0.6
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

TEST NUMBER: P980150

CATALOG NUMBER: PRLX-242-940-18L-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	17.14	18.68	17.50	18.99	19.30	17.14	18.68	17.50	18.99	19.30
	3H	17.12	18.49	17.50	18.81	19.18	17.12	18.49	17.50	18.81	19.18
	4H	17.07	18.34	17.47	18.69	19.07	17.07	18.34	17.47	18.69	19.07
	6H	17.01	18.18	17.42	18.55	18.94	17.01	18.18	17.42	18.55	18.94
	8H	16.97	18.09	17.40	18.48	18.88	16.97	18.09	17.40	18.48	18.88
	12H	16.94	18.00	17.37	18.39	18.82	16.94	18.00	17.37	18.39	18.82
4H	2H	17.19	18.47	17.59	18.81	19.19	17.19	18.47	17.59	18.81	19.19
	3H	17.21	18.24	17.62	18.64	19.04	17.21	18.24	17.62	18.64	19.04
	4H	17.15	18.07	17.58	18.48	18.92	17.15	18.07	17.58	18.48	18.92
	6H	17.09	17.88	17.55	18.32	18.79	17.09	17.88	17.55	18.32	18.79
	8H	17.04	17.78	17.51	18.23	18.70	17.04	17.78	17.51	18.23	18.70
	12H	17.01	17.67	17.49	18.14	18.62	17.01	17.67	17.49	18.14	18.62
8H	4H	17.05	17.79	17.51	18.23	18.70	17.05	17.79	17.51	18.23	18.70
	6H	16.96	17.57	17.46	18.06	18.54	16.96	17.57	17.46	18.06	18.54
	8H	16.91	17.46	17.43	17.97	18.46	16.91	17.46	17.43	17.97	18.46
	12H	16.87	17.36	17.38	17.85	18.42	16.87	17.36	17.38	17.85	18.42
12H	4H	17.01	17.67	17.50	18.15	18.62	17.01	17.67	17.50	18.15	18.62
	6H	16.91	17.46	17.42	17.97	18.46	16.91	17.46	17.42	17.97	18.46
	8H	16.87	17.36	17.38	17.85	18.42	16.87	17.36	17.38	17.85	18.42