

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: P980250

Luminaire Tested: PRLX-243-927-31L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-31L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

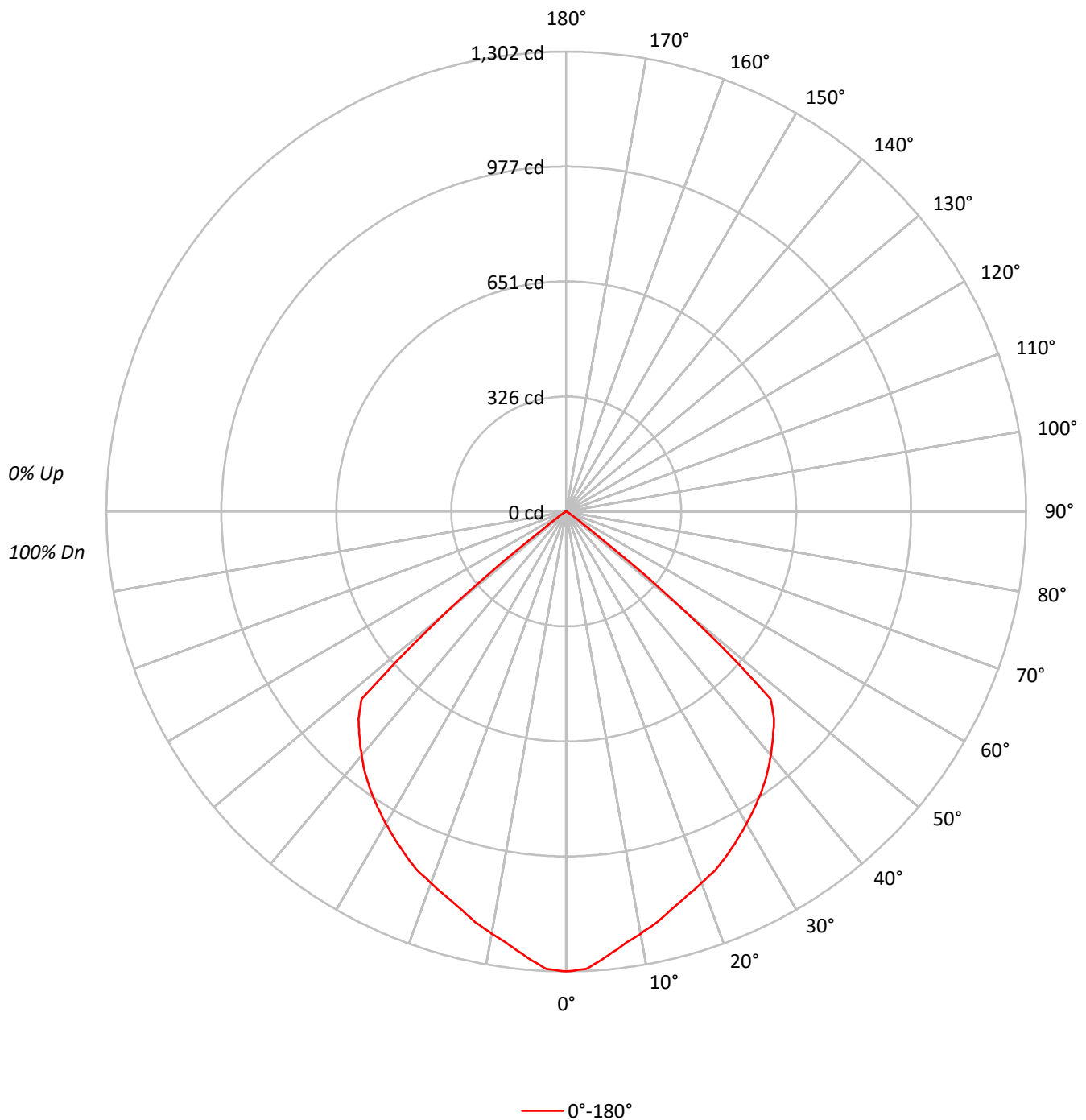
Lumens per Lamp: N/A
Luminaire Lumens: 2239.7 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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: P980250

CATALOG NUMBER: PRLX-243-927-31L-C-U-S-BLAK-X

Luminous Intensity Polar Plot



TEST NUMBER: P980250

CATALOG NUMBER: PRLX-243-927-31L-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96
2	105	99	95	91	103	98	93	89	94	91	88		91	88	86		88
3	98	91	85	80	96	89	84	79	86	82	78		84	80	77		82
4	92	83	76	71	90	81	75	70	79	74	69		77	72	69		75
5	86	75	68	63	84	74	68	63	73	67	62		71	66	62		69
6	80	69	62	57	78	68	61	56	67	61	56		65	60	56		64
7	75	63	56	51	73	63	56	51	61	55	51		60	54	50		59
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50
10	62	50	43	38	61	50	43	38	49	43	38		48	42	38		47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6424
5°	6277
10°	6079
15°	5941
20°	5877
25°	5850
30°	5816
35°	5813
40°	5804
45°	5804
50°	3364
55°	298
60°	45
65°	54
70°	66
75°	71
80°	51
85°	51

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5804 cd/sqm

TEST NUMBER: P980250

CATALOG NUMBER: PRLX-243-927-31L-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	5.3
10°-20°	328.9	14.7
20°-30°	495.4	22.1
30°-40°	603.9	27.0
40°-50°	606.9	27.1
50°-60°	75.8	3.4
60°-70°	4.6	0.2
70°-80°	3.7	0.2
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°	943.5	42.1
0°-40°	1547.4	69.1
0°-60°	2230.1	99.6
0°-90°	2239.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1302	
5°	1267	119
15°	1163	329
25°	1075	495
35°	965	604
45°	832	607
55°	35	76
65°	5	5
75°	4	4
85°	1	1
90°	0	

TEST NUMBER: P980250

CATALOG NUMBER: PRLX-243-927-31L-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1302.0
2.5°	1296.5
5°	1267.3
7.5°	1237.2
10°	1213.4
12.5°	1190.6
15°	1163.2
17.5°	1140.4
20°	1119.4
22.5°	1100.2
25°	1074.6
27.5°	1048.2
30°	1020.8
32.5°	993.4
35°	965.1
37.5°	934.9
40°	901.2
42.5°	866.5
45°	831.8
47.5°	785.2
50°	438.3
52.5°	83.1
55°	34.7
57.5°	11.0
60°	4.6
62.5°	4.6
65°	4.6
67.5°	4.6
70°	4.6
72.5°	4.6
75°	3.7
77.5°	2.7
80°	1.8
82.5°	1.8
85°	0.9
87.5°	0.9
90°	0.0

TEST NUMBER: P980250

CATALOG NUMBER: PRLX-243-927-31L-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

END OF REPORT