

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: P980260

Luminaire Tested: PRLX-243-927-LL5-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980260
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-LL5-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

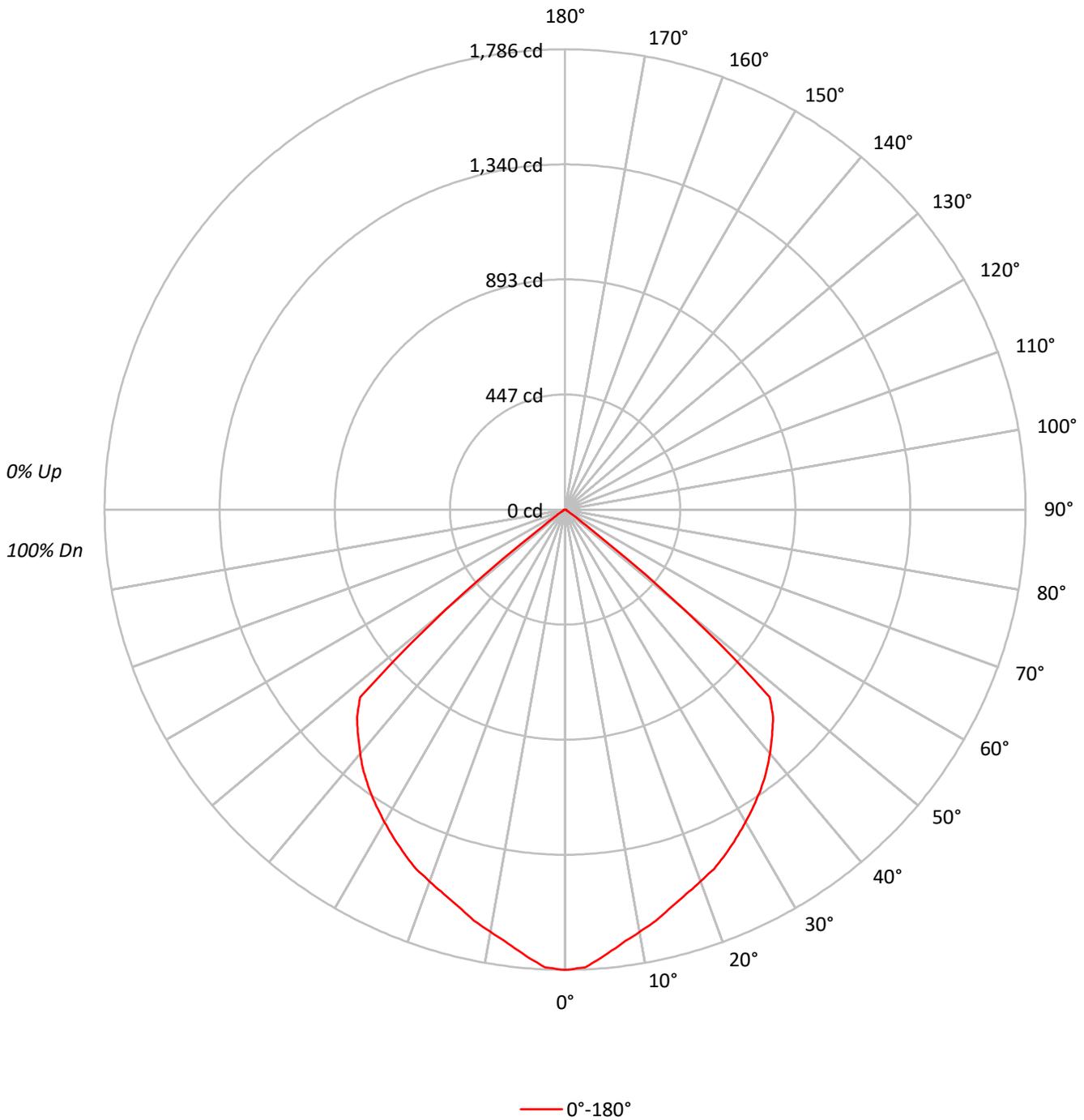
Lumens per Lamp: N/A
Luminaire Lumens: 3072.1 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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: P980260
CATALOG NUMBER: PRLX-243-927-LL5-C-U-S-BLAK-X

Luminous Intensity Polar Plot



TEST NUMBER: P980260

CATALOG NUMBER: PRLX-243-927-LL5-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	75	68	63	84	74	68	63	73	67	62	71	66	62	69	65	61	59
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8811
5°	8609
10°	8339
15°	8150
20°	8062
25°	8025
30°	7977
35°	7973
40°	7961
45°	7961
50°	4615
55°	409
60°	62
65°	74
70°	91
75°	95
80°	71
85°	74

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7961 cd/sqm

TEST NUMBER: P980260

CATALOG NUMBER: PRLX-243-927-LL5-C-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	5.3
10°-20°	451.1	14.7
20°-30°	679.6	22.1
30°-40°	828.3	27.0
40°-50°	832.5	27.1
50°-60°	103.9	3.4
60°-70°	6.3	0.2
70°-80°	5.1	0.2
80°-90°	1.7	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°	1294.2	42.1
0°-40°	2122.6	69.1
0°-60°	3059.0	99.6
0°-90°	3072.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3072.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1786	
5°	1738	164
15°	1596	451
25°	1474	680
35°	1324	828
45°	1141	832
55°	48	104
65°	6	6
75°	5	5
85°	1	2
90°	0	

TEST NUMBER: P980260

CATALOG NUMBER: PRLX-243-927-LL5-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1785.9
2.5°	1778.4
5°	1738.3
7.5°	1697.0
10°	1664.4
12.5°	1633.1
15°	1595.6
17.5°	1564.3
20°	1535.4
22.5°	1509.1
25°	1474.1
27.5°	1437.8
30°	1400.2
32.5°	1362.6
35°	1323.8
37.5°	1282.5
40°	1236.1
42.5°	1188.5
45°	1140.9
47.5°	1077.1
50°	601.2
52.5°	114.0
55°	47.6
57.5°	15.0
60°	6.3
62.5°	6.3
65°	6.3
67.5°	6.3
70°	6.3
72.5°	6.3
75°	5.0
77.5°	3.8
80°	2.5
82.5°	2.5
85°	1.3
87.5°	1.3
90°	0.0



TEST NUMBER: P980260
 CATALOG NUMBER: PRLX-243-927-LL5-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