

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: P980180

Luminaire Tested: PRLX-242-940-43L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980180
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-242-940-43L-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

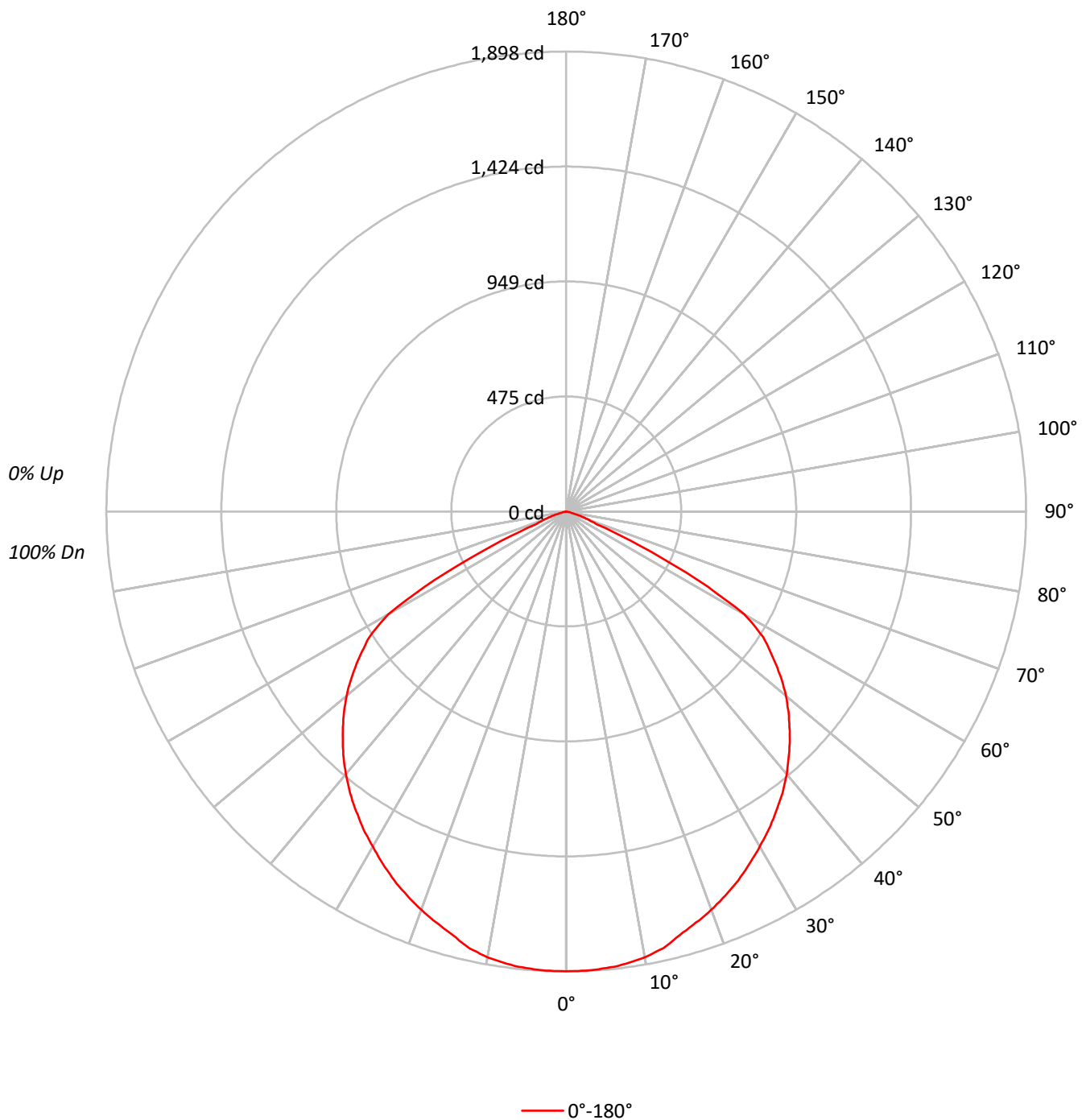
Lumens per Lamp: N/A
Luminaire Lumens: 4755.9 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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Luminous Intensity Polar Plot



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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°	8493
5°	8500
10°	8488
15°	8384
20°	8334
25°	8296
30°	8256
35°	8254
40°	8270
45°	8257
50°	8241
55°	8103
60°	7589
65°	3540
70°	1192
75°	368
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8257 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.9	3.8
10°-20°	511.6	10.8
20°-30°	774.2	16.3
30°-40°	946.3	19.9
40°-50°	1006.7	21.2
50°-60°	923.9	19.4
60°-70°	379.2	8.0
70°-80°	34.2	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°	1465.8	30.8
0°-40°	2412.0	50.7
0°-60°	4342.6	91.3
0°-90°	4755.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4755.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1898	
5°	1892	180
15°	1810	512
25°	1680	774
35°	1511	946
45°	1305	1007
55°	1039	924
65°	334	379
75°	21	34
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1897.9
2.5°	1896.4
5°	1892.2
7.5°	1883.6
10°	1868.0
12.5°	1846.6
15°	1809.7
17.5°	1779.8
20°	1749.9
22.5°	1715.8
25°	1680.2
27.5°	1638.9
30°	1597.7
32.5°	1556.4
35°	1510.9
37.5°	1465.4
40°	1415.6
42.5°	1361.5
45°	1304.6
47.5°	1246.3
50°	1183.7
52.5°	1114.0
55°	1038.6
57.5°	963.2
60°	847.9
62.5°	611.8
65°	334.3
67.5°	133.7
70°	91.1
72.5°	62.6
75°	21.3
77.5°	1.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

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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	20.22	21.76	20.59	22.07	22.39	20.22	21.76	20.59	22.07	22.39
	3H	20.21	21.57	20.59	21.90	22.26	20.21	21.57	20.59	21.90	22.26
	4H	20.16	21.43	20.56	21.78	22.16	20.16	21.43	20.56	21.78	22.16
	6H	20.09	21.26	20.51	21.63	22.02	20.09	21.26	20.51	21.63	22.02
	8H	20.06	21.17	20.49	21.56	21.96	20.06	21.17	20.49	21.56	21.96
	12H	20.03	21.09	20.46	21.47	21.90	20.03	21.09	20.46	21.47	21.90
4H	2H	20.28	21.55	20.68	21.90	22.28	20.28	21.55	20.68	21.90	22.28
	3H	20.29	21.33	20.70	21.73	22.13	20.29	21.33	20.70	21.73	22.13
	4H	20.23	21.15	20.67	21.57	22.01	20.23	21.15	20.67	21.57	22.01
	6H	20.17	20.97	20.63	21.41	21.87	20.17	20.97	20.63	21.41	21.87
	8H	20.13	20.87	20.59	21.31	21.78	20.13	20.87	20.59	21.31	21.78
	12H	20.09	20.75	20.57	21.23	21.70	20.09	20.75	20.57	21.23	21.70
8H	4H	20.13	20.87	20.60	21.32	21.79	20.13	20.87	20.60	21.32	21.79
	6H	20.05	20.66	20.55	21.15	21.63	20.05	20.66	20.55	21.15	21.63
	8H	19.99	20.54	20.51	21.05	21.54	19.99	20.54	20.51	21.05	21.54
	12H	19.96	20.44	20.47	20.93	21.50	19.96	20.44	20.47	20.93	21.50
12H	4H	20.10	20.76	20.58	21.24	21.71	20.10	20.76	20.58	21.24	21.71
	6H	19.99	20.54	20.51	21.05	21.54	19.99	20.54	20.51	21.05	21.54
	8H	19.96	20.44	20.47	20.93	21.50	19.96	20.44	20.47	20.93	21.50