

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: P980100

Luminaire Tested: PRLX-242-935-43L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980100
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-242-935-43L-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

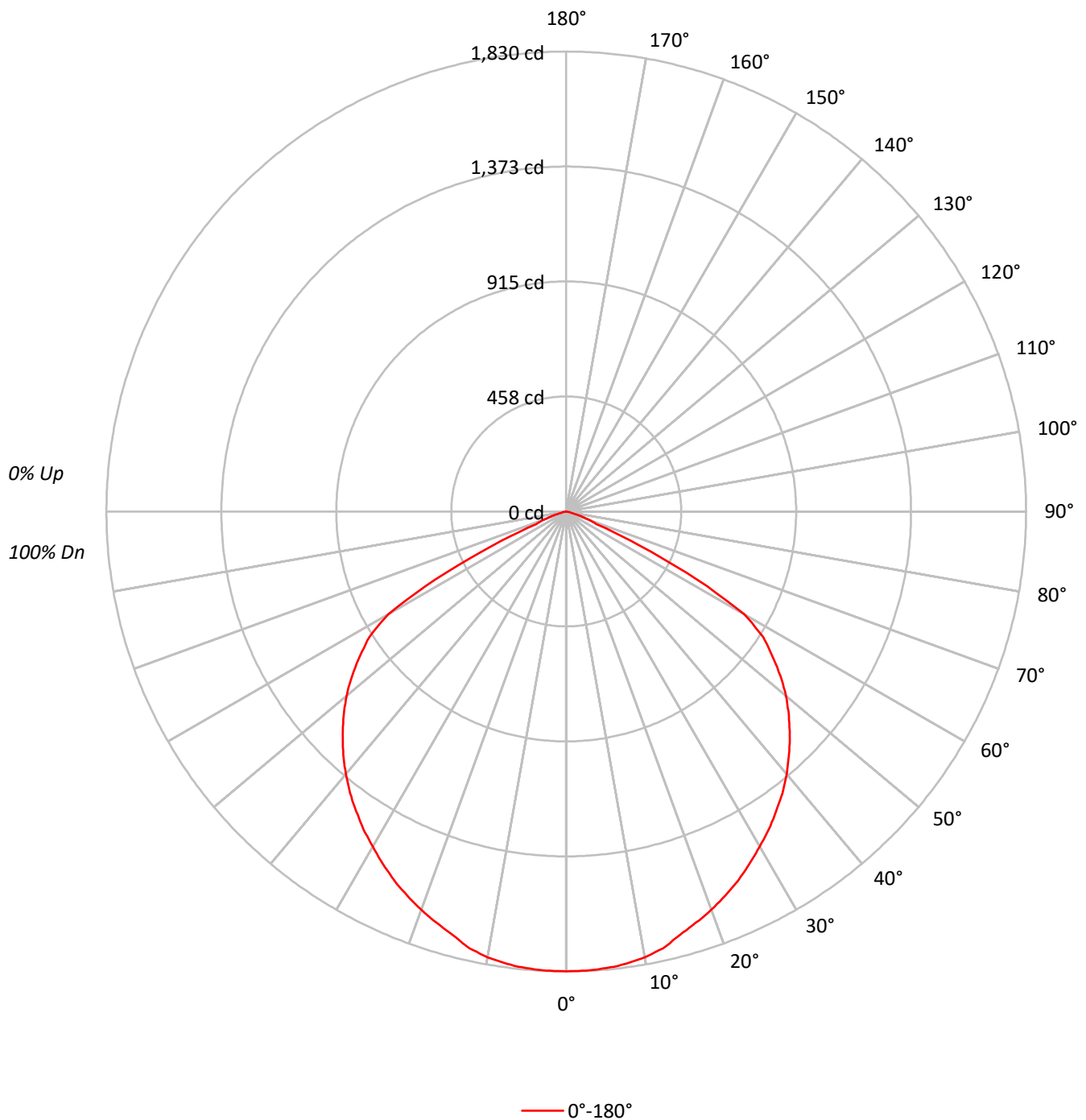
Lumens per Lamp: N/A
Luminaire Lumens: 4585.5 lumens
Efficiency: N/A
Efficacy: 155.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8189
5°	8196
10°	8184
15°	8084
20°	8035
25°	7999
30°	7960
35°	7958
40°	7973
45°	7961
50°	7946
55°	7812
60°	7317
65°	3414
70°	1149
75°	356
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7961 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	3.8
10°-20°	493.3	10.8
20°-30°	746.5	16.3
30°-40°	912.3	19.9
40°-50°	970.6	21.2
50°-60°	890.8	19.4
60°-70°	365.6	8.0
70°-80°	33.0	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°	1413.2	30.8
0°-40°	2325.5	50.7
0°-60°	4186.9	91.3
0°-90°	4585.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4585.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1830	
5°	1824	173
15°	1745	493
25°	1620	746
35°	1457	912
45°	1258	971
55°	1001	891
65°	322	366
75°	21	33
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1829.9
2.5°	1828.5
5°	1824.4
7.5°	1816.1
10°	1801.0
12.5°	1780.5
15°	1744.8
17.5°	1716.0
20°	1687.2
22.5°	1654.3
25°	1620.0
27.5°	1580.2
30°	1540.4
32.5°	1500.6
35°	1456.7
37.5°	1412.9
40°	1364.8
42.5°	1312.7
45°	1257.9
47.5°	1201.6
50°	1141.3
52.5°	1074.0
55°	1001.3
57.5°	928.6
60°	817.5
62.5°	589.8
65°	322.4
67.5°	128.9
70°	87.8
72.5°	60.4
75°	20.6
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	20.10	21.63	20.46	21.95	22.26	20.10	21.63	20.46	21.95	22.26
	3H	20.08	21.44	20.46	21.77	22.13	20.08	21.44	20.46	21.77	22.13
	4H	20.03	21.30	20.43	21.65	22.03	20.03	21.30	20.43	21.65	22.03
	6H	19.97	21.14	20.38	21.50	21.90	19.97	21.14	20.38	21.50	21.90
	8H	19.93	21.04	20.36	21.43	21.83	19.93	21.04	20.36	21.43	21.83
	12H	19.90	20.96	20.33	21.34	21.77	19.90	20.96	20.33	21.34	21.77
4H	2H	20.15	21.42	20.55	21.77	22.15	20.15	21.42	20.55	21.77	22.15
	3H	20.16	21.20	20.58	21.60	22.00	20.16	21.20	20.58	21.60	22.00
	4H	20.10	21.03	20.54	21.44	21.88	20.10	21.03	20.54	21.44	21.88
	6H	20.04	20.84	20.50	21.28	21.74	20.04	20.84	20.50	21.28	21.74
	8H	20.00	20.74	20.46	21.18	21.65	20.00	20.74	20.46	21.18	21.65
	12H	19.96	20.62	20.45	21.10	21.57	19.96	20.62	20.45	21.10	21.57
8H	4H	20.01	20.75	20.47	21.19	21.66	20.01	20.75	20.47	21.19	21.66
	6H	19.92	20.53	20.42	21.02	21.50	19.92	20.53	20.42	21.02	21.50
	8H	19.87	20.41	20.38	20.92	21.41	19.87	20.41	20.38	20.92	21.41
	12H	19.83	20.31	20.34	20.81	21.37	19.83	20.31	20.34	20.81	21.37
12H	4H	19.97	20.63	20.45	21.11	21.58	19.97	20.63	20.45	21.11	21.58
	6H	19.87	20.41	20.38	20.92	21.41	19.87	20.41	20.38	20.92	21.41
	8H	19.83	20.31	20.34	20.81	21.37	19.83	20.31	20.34	20.81	21.37