

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: P866972

Luminaire Tested: PRLX-2002-L-927-83L-L-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-83)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-927-83L-L-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

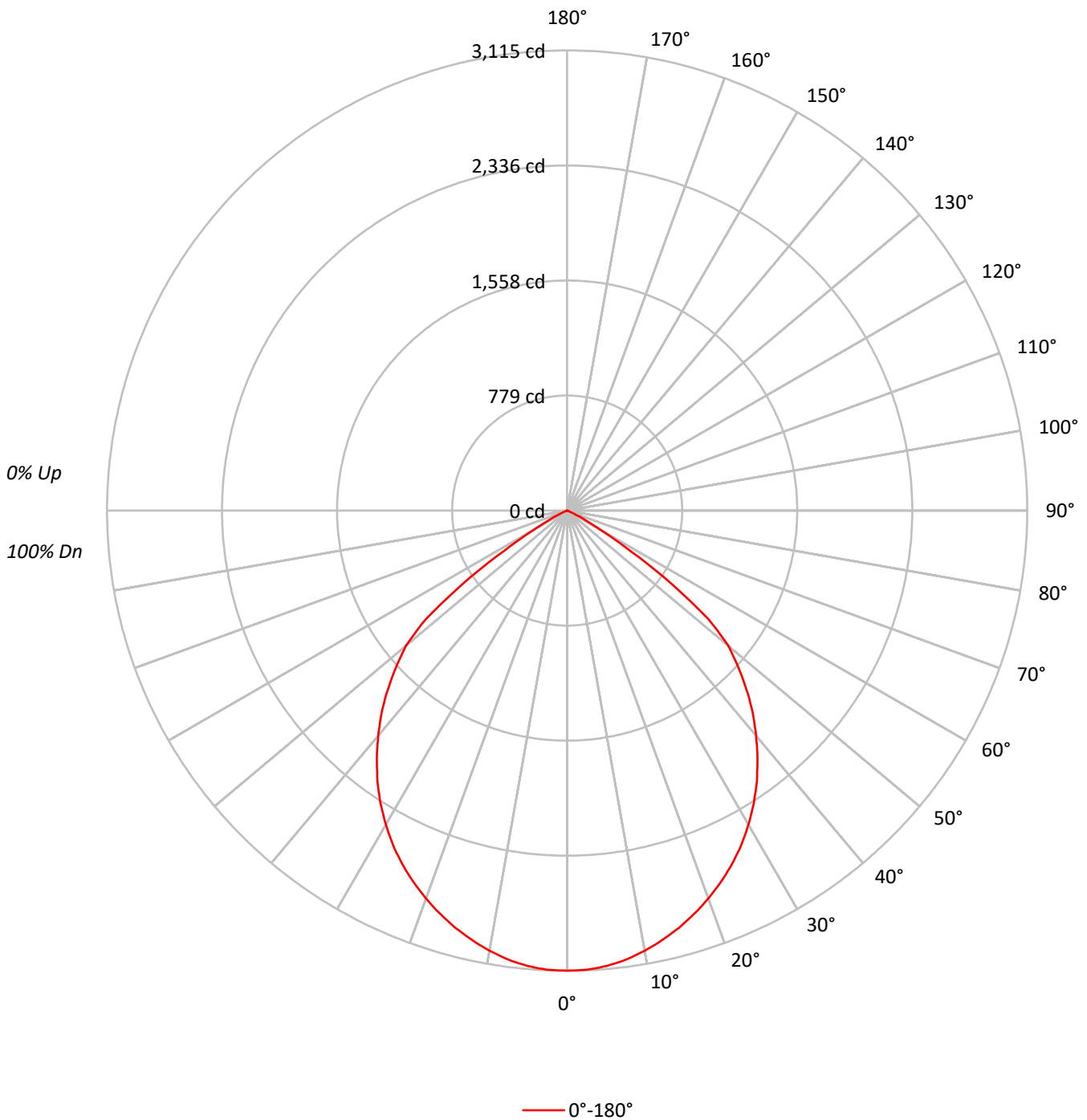
Lumens per Lamp: N/A
Luminaire Lumens: 5890.9 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
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	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	105	103	109	106	104	101	102	100	98		98	97	95		95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86		90	87	84		87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75		82	78	74		79	76	73	71
4	90	80	73	68	88	79	72	67	77	71	66		75	70	66		73	68	65	63
5	84	73	65	60	82	72	65	60	70	64	59		68	63	58		66	62	58	56
6	78	66	59	53	76	66	58	53	64	57	53		62	57	52		61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	47		57	51	47		56	51	47	45
8	68	56	48	43	66	55	48	43	54	47	43		53	47	43		52	46	42	41
9	64	52	44	39	62	51	44	39	50	43	39		49	43	39		48	43	39	37
10	60	48	41	36	59	47	40	36	46	40	36		45	40	35		45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15367
5°	15324
10°	15159
15°	14933
20°	14673
25°	14373
30°	13984
35°	13480
40°	12810
45°	11994
50°	10933
55°	7310
60°	2597
65°	600
70°	97
75°	101
80°	134
85°	153

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11994 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	5.0
10°-20°	823.9	14.0
20°-30°	1215.0	20.6
30°-40°	1396.2	23.7
40°-50°	1321.8	22.4
50°-60°	752.6	12.8
60°-70°	79.8	1.4
70°-80°	5.7	0.1
80°-90°	2.6	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°	2332.1	39.6
0°-40°	3728.4	63.3
0°-60°	5802.8	98.5
0°-90°	5890.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5890.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3115	
5°	3094	293
15°	2924	824
25°	2640	1215
35°	2238	1396
45°	1719	1322
55°	850	753
65°	51	80
75°	5	6
85°	3	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3114.7
2.5°	3111.3
5°	3094.0
7.5°	3065.2
10°	3025.8
12.5°	2977.7
15°	2923.6
17.5°	2862.1
20°	2794.6
22.5°	2721.2
25°	2640.3
27.5°	2553.5
30°	2454.6
32.5°	2350.4
35°	2238.1
37.5°	2116.5
40°	1988.9
42.5°	1860.0
45°	1719.0
47.5°	1572.7
50°	1424.4
52.5°	1202.6
55°	849.8
57.5°	507.1
60°	263.2
62.5°	131.6
65°	51.4
67.5°	10.0
70°	6.7
72.5°	6.0
75°	5.3
77.5°	4.7
80°	4.7
82.5°	3.3
85°	2.7
87.5°	1.3
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	15.39	16.75	15.75	17.06	17.38	15.39	16.75	15.75	17.06	17.38
	3H	15.26	16.46	15.64	16.79	17.15	15.26	16.46	15.64	16.79	17.15
	4H	15.19	16.30	15.60	16.65	17.04	15.19	16.30	15.60	16.65	17.04
	6H	15.12	16.13	15.53	16.50	16.90	15.12	16.13	15.53	16.50	16.90
	8H	15.08	16.04	15.51	16.43	16.83	15.08	16.04	15.51	16.43	16.83
	12H	15.04	15.95	15.47	16.34	16.77	15.04	15.95	15.47	16.34	16.77
4H	2H	15.22	16.32	15.62	16.67	17.06	15.22	16.32	15.62	16.67	17.06
	3H	15.09	15.98	15.50	16.38	16.79	15.09	15.98	15.50	16.38	16.79
	4H	15.01	15.79	15.44	16.21	16.66	15.01	15.79	15.44	16.21	16.66
	6H	14.93	15.61	15.39	16.05	16.52	14.93	15.61	15.39	16.05	16.52
	8H	14.87	15.50	15.34	15.95	16.42	14.87	15.50	15.34	15.95	16.42
	12H	14.82	15.38	15.31	15.87	16.34	14.82	15.38	15.31	15.87	16.34
8H	4H	14.87	15.50	15.34	15.95	16.42	14.87	15.50	15.34	15.95	16.42
	6H	14.76	15.28	15.27	15.78	16.26	14.76	15.28	15.27	15.78	16.26
	8H	14.70	15.17	15.22	15.69	16.18	14.70	15.17	15.22	15.69	16.18
	12H	14.65	15.07	15.16	15.57	16.14	14.65	15.07	15.16	15.57	16.14
12H	4H	14.82	15.38	15.31	15.86	16.34	14.82	15.38	15.31	15.86	16.34
	6H	14.69	15.17	15.22	15.68	16.18	14.69	15.17	15.22	15.68	16.18
	8H	14.64	15.07	15.16	15.57	16.14	14.64	15.07	15.16	15.57	16.14