

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: P867164

Luminaire Tested: PRLX-2002-L-940-83L-L-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867164
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-940-83L-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

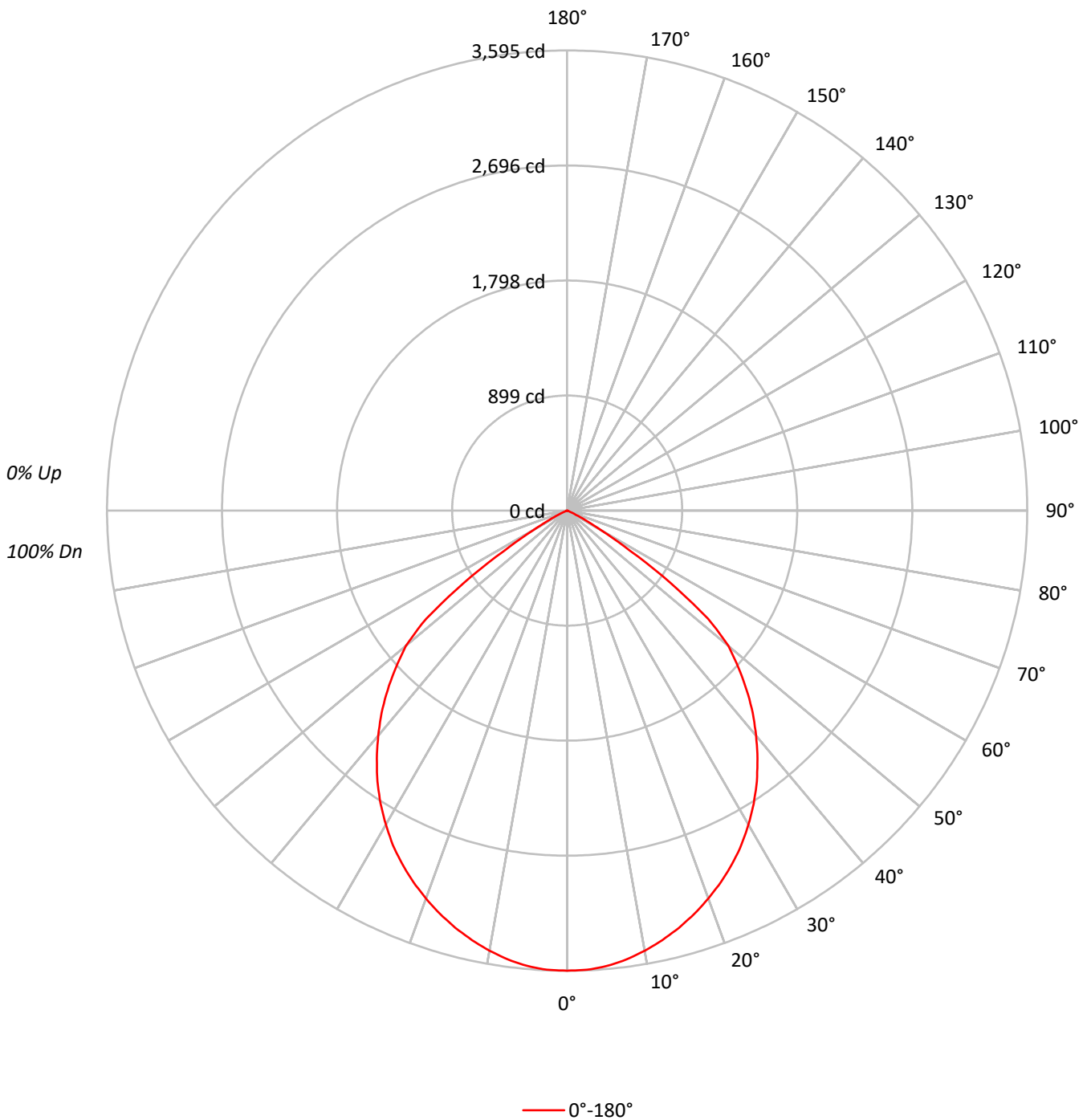
Lumens per Lamp: N/A
Luminaire Lumens: 6799.1 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (Ain): 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°	17736
5°	17685
10°	17496
15°	17235
20°	16935
25°	16589
30°	16140
35°	15558
40°	14784
45°	13843
50°	12619
55°	8437
60°	2998
65°	693
70°	111
75°	118
80°	153
85°	175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13843 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.4	5.0
10°-20°	951.0	14.0
20°-30°	1402.3	20.6
30°-40°	1611.5	23.7
40°-50°	1525.6	22.4
50°-60°	868.6	12.8
60°-70°	92.1	1.4
70°-80°	6.6	0.1
80°-90°	3.0	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°	2691.6	39.6
0°-40°	4303.1	63.3
0°-60°	6697.3	98.5
0°-90°	6799.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6799.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3595	
5°	3571	338
15°	3374	951
25°	3047	1402
35°	2583	1611
45°	1984	1526
55°	981	869
65°	59	92
75°	6	7
85°	3	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	3594.8
2.5°	3591.0
5°	3570.9
7.5°	3537.8
10°	3492.3
12.5°	3436.7
15°	3374.3
17.5°	3303.3
20°	3225.5
22.5°	3140.6
25°	3047.3
27.5°	2947.1
30°	2833.0
32.5°	2712.7
35°	2583.1
37.5°	2442.8
40°	2295.5
42.5°	2146.7
45°	1984.0
47.5°	1815.1
50°	1644.0
52.5°	1388.0
55°	980.8
57.5°	585.3
60°	303.8
62.5°	151.9
65°	59.4
67.5°	11.6
70°	7.7
72.5°	6.9
75°	6.2
77.5°	5.4
80°	5.4
82.5°	3.9
85°	3.1
87.5°	1.5
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	15.89	17.25	16.25	17.56	17.88	15.89	17.25	16.25	17.56	17.88
	3H	15.76	16.96	16.14	17.29	17.65	15.76	16.96	16.14	17.29	17.65
	4H	15.69	16.80	16.10	17.15	17.53	15.69	16.80	16.10	17.15	17.53
	6H	15.62	16.63	16.03	17.00	17.40	15.62	16.63	16.03	17.00	17.40
	8H	15.58	16.54	16.01	16.93	17.33	15.58	16.54	16.01	16.93	17.33
	12H	15.54	16.45	15.97	16.83	17.27	15.54	16.45	15.97	16.83	17.27
4H	2H	15.71	16.82	16.12	17.17	17.55	15.71	16.82	16.12	17.17	17.55
	3H	15.59	16.48	16.00	16.88	17.29	15.59	16.48	16.00	16.88	17.29
	4H	15.51	16.29	15.94	16.71	17.16	15.51	16.29	15.94	16.71	17.16
	6H	15.43	16.10	15.89	16.55	17.02	15.43	16.10	15.89	16.55	17.02
	8H	15.37	16.00	15.84	16.45	16.92	15.37	16.00	15.84	16.45	16.92
	12H	15.32	15.88	15.81	16.37	16.84	15.32	15.88	15.81	16.37	16.84
8H	4H	15.37	16.00	15.84	16.45	16.92	15.37	16.00	15.84	16.45	16.92
	6H	15.26	15.78	15.76	16.28	16.76	15.26	15.78	15.76	16.28	16.76
	8H	15.19	15.67	15.72	16.18	16.68	15.19	15.67	15.72	16.18	16.68
	12H	15.14	15.57	15.66	16.07	16.64	15.14	15.57	15.66	16.07	16.64
12H	4H	15.32	15.88	15.80	16.36	16.84	15.32	15.88	15.80	16.36	16.84
	6H	15.19	15.67	15.71	16.18	16.67	15.19	15.67	15.71	16.18	16.67
	8H	15.14	15.57	15.66	16.06	16.63	15.14	15.57	15.66	16.06	16.63