

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: P867108

Luminaire Tested: PRLX-2002-L-940-100L-L-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867108
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-940-100L-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 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

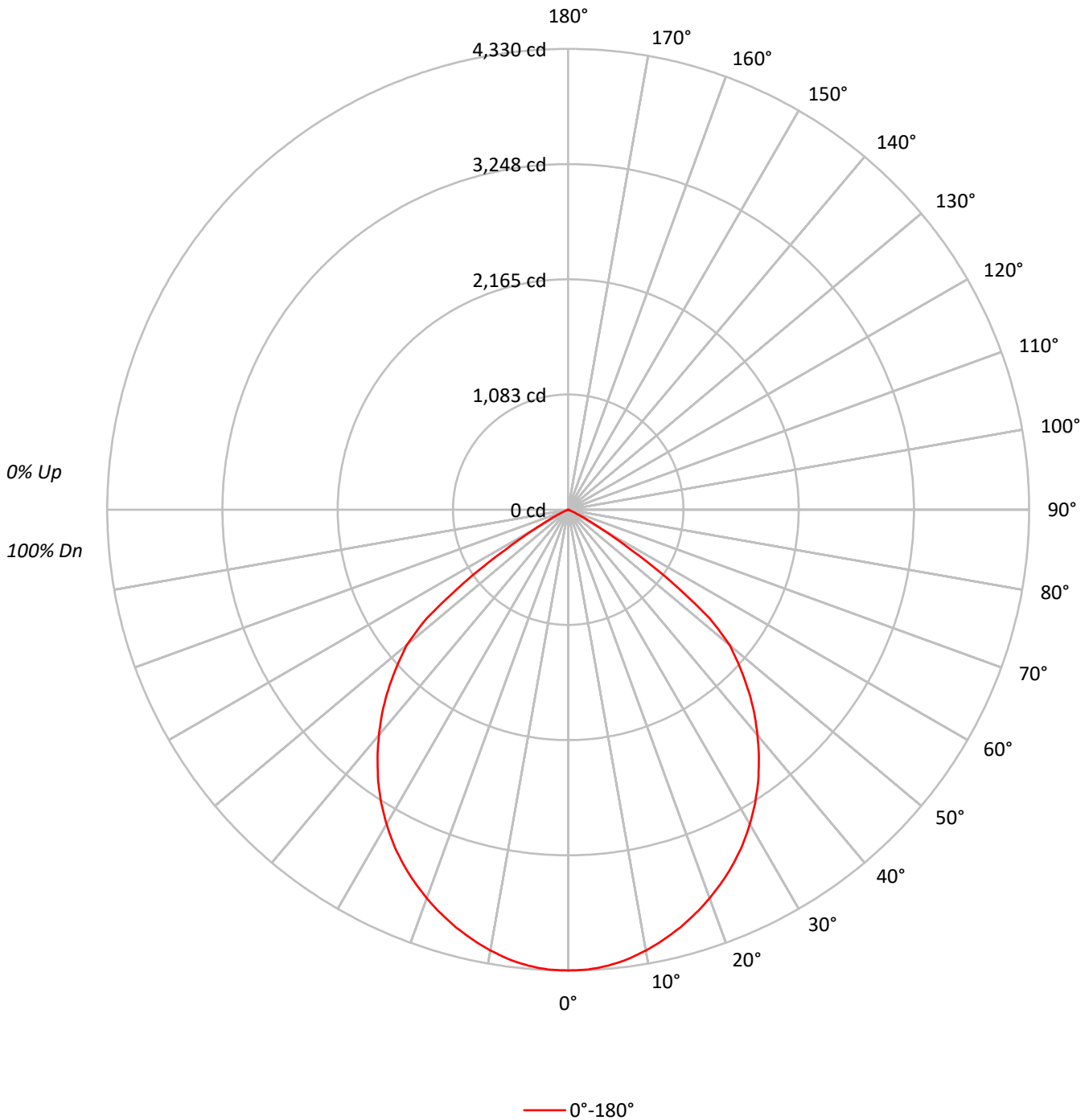
Lumens per Lamp: N/A
Luminaire Lumens: 8188.8 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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°	21361
5°	21300
10°	21072
15°	20758
20°	20396
25°	19980
30°	19438
35°	18738
40°	17806
45°	16673
50°	15198
55°	10161
60°	3611
65°	835
70°	134
75°	141
80°	185
85°	209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.5	5.0
10°-20°	1145.3	14.0
20°-30°	1689.0	20.6
30°-40°	1940.9	23.7
40°-50°	1837.5	22.4
50°-60°	1046.2	12.8
60°-70°	110.9	1.4
70°-80°	8.0	0.1
80°-90°	3.7	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°	3241.8	39.6
0°-40°	5182.6	63.3
0°-60°	8066.3	98.5
0°-90°	8188.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8188.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4330	
5°	4301	408
15°	4064	1145
25°	3670	1689
35°	3111	1941
45°	2390	1837
55°	1181	1046
65°	72	111
75°	7	8
85°	4	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	4329.6
2.5°	4325.0
5°	4300.8
7.5°	4260.9
10°	4206.1
12.5°	4139.2
15°	4064.0
17.5°	3978.5
20°	3884.7
22.5°	3782.6
25°	3670.2
27.5°	3549.5
30°	3412.0
32.5°	3267.2
35°	3111.1
37.5°	2942.1
40°	2764.7
42.5°	2585.5
45°	2389.5
47.5°	2186.2
50°	1980.0
52.5°	1671.7
55°	1181.3
57.5°	704.9
60°	365.9
62.5°	183.0
65°	71.5
67.5°	13.9
70°	9.3
72.5°	8.4
75°	7.4
77.5°	6.5
80°	6.5
82.5°	4.6
85°	3.7
87.5°	1.9
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	16.53	17.90	16.90	18.21	18.52	16.53	17.90	16.90	18.21	18.52
	3H	16.41	17.60	16.79	17.93	18.30	16.41	17.60	16.79	17.93	18.30
	4H	16.34	17.45	16.74	17.80	18.18	16.34	17.45	16.74	17.80	18.18
	6H	16.26	17.28	16.68	17.65	18.04	16.26	17.28	16.68	17.65	18.04
	8H	16.22	17.18	16.65	17.57	17.98	16.22	17.18	16.65	17.57	17.98
	12H	16.18	17.10	16.61	17.48	17.91	16.18	17.10	16.61	17.48	17.91
4H	2H	16.36	17.47	16.76	17.82	18.20	16.36	17.47	16.76	17.82	18.20
	3H	16.24	17.12	16.65	17.53	17.93	16.24	17.12	16.65	17.53	17.93
	4H	16.15	16.94	16.59	17.36	17.80	16.15	16.94	16.59	17.36	17.80
	6H	16.07	16.75	16.54	17.20	17.66	16.07	16.75	16.54	17.20	17.66
	8H	16.02	16.65	16.48	17.10	17.57	16.02	16.65	16.48	17.10	17.57
	12H	15.97	16.53	16.45	17.01	17.49	15.97	16.53	16.45	17.01	17.49
8H	4H	16.01	16.65	16.48	17.09	17.56	16.01	16.65	16.48	17.09	17.56
	6H	15.91	16.43	16.41	16.93	17.41	15.91	16.43	16.41	16.93	17.41
	8H	15.84	16.31	16.36	16.83	17.32	15.84	16.31	16.36	16.83	17.32
	12H	15.79	16.22	16.30	16.71	17.28	15.79	16.22	16.30	16.71	17.28
12H	4H	15.96	16.52	16.45	17.01	17.48	15.96	16.52	16.45	17.01	17.48
	6H	15.84	16.31	16.36	16.83	17.32	15.84	16.31	16.36	16.83	17.32
	8H	15.79	16.22	16.30	16.71	17.28	15.79	16.22	16.30	16.71	17.28