

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: P866204

Luminaire Tested: PRLX-2002-M-927-75L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866204  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-75L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

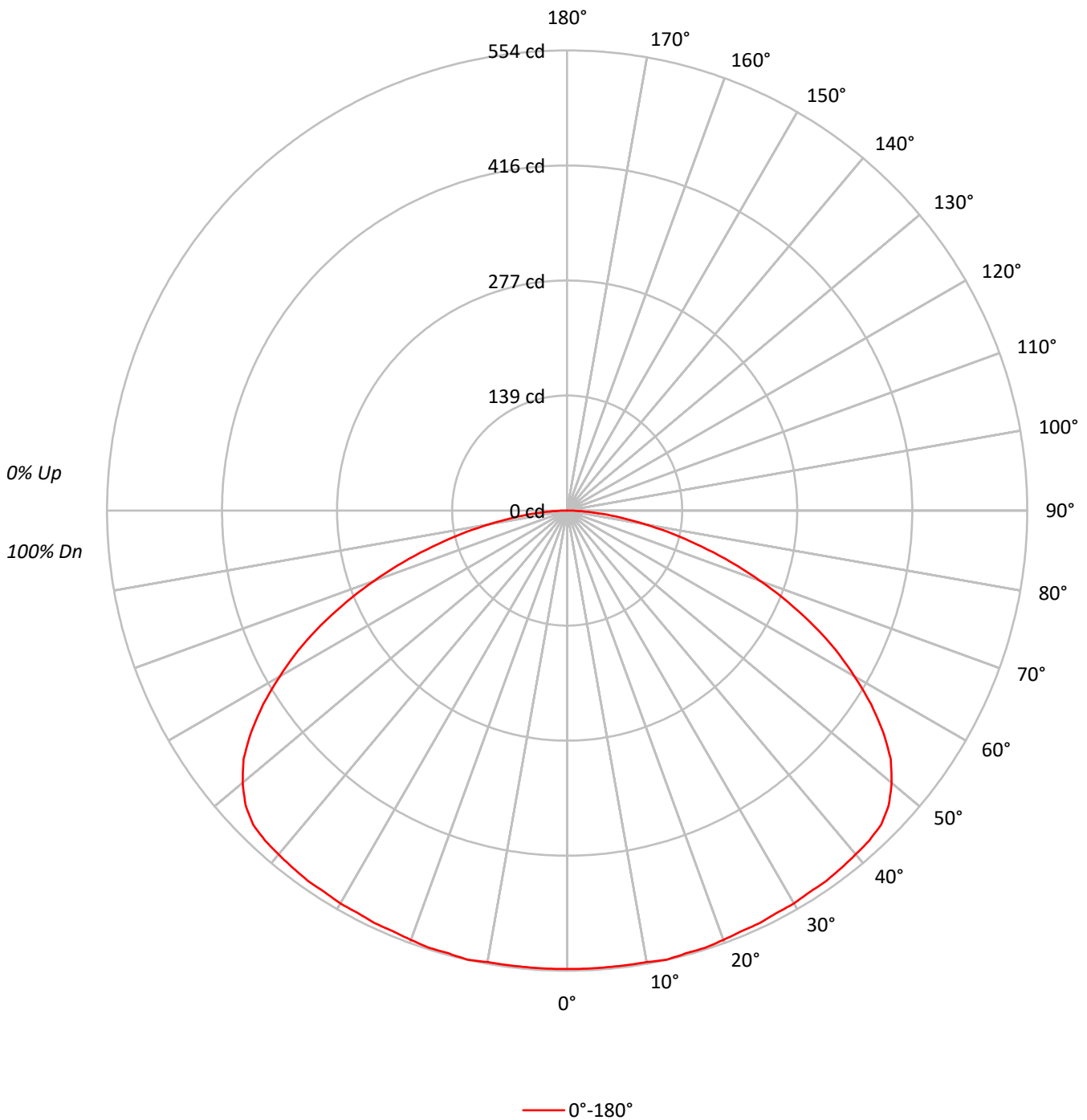
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2174.0 lumens  
Efficiency: N/A  
Efficacy: 31.2 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 69.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	108	103	98	94	105	100	96	92	96	93	90		92	89	87		89	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	85	75	67	60	72	65	59		69	63	58		67	61	57	55
4	80	67	58	51	78	66	57	50	63	56	49		61	54	49		59	53	48	46
5	73	59	50	43	71	58	49	42	56	48	42		54	47	41		52	46	41	39
6	67	53	43	37	65	52	43	37	50	42	36		48	41	36		47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28		40	33	28		39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25		36	30	25		35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22		34	27	22		33	26	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	4391
5°	4408
10°	4459
15°	4546
20°	4656
25°	4811
30°	5017
35°	5285
40°	5612
45°	6016
50°	6312
55°	6440
60°	6358
65°	6161
70°	5755
75°	5149
80°	4357
85°	3478

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 6440 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.7	2.4
10°-20°	156.5	7.2
20°-30°	253.4	11.7
30°-40°	341.4	15.7
40°-50°	410.8	18.9
50°-60°	412.6	19.0
60°-70°	322.5	14.8
70°-80°	178.6	8.2
80°-90°	45.5	2.1
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°	462.6	21.3
0°-40°	803.9	37.0
0°-60°	1627.4	74.9
0°-90°	2174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2174.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	552	
5°	552	53
15°	552	156
25°	548	253
35°	544	341
45°	535	411
55°	464	413
65°	327	322
75°	168	179
85°	38	46
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	551.9
2.5°	551.9
5°	551.9
7.5°	551.9
10°	551.9
12.5°	553.8
15°	551.9
17.5°	551.9
20°	550.0
22.5°	548.1
25°	548.1
27.5°	546.1
30°	546.1
32.5°	544.2
35°	544.2
37.5°	542.3
40°	540.4
42.5°	538.5
45°	534.7
47.5°	525.2
50°	510.0
52.5°	491.0
55°	464.3
57.5°	433.9
60°	399.6
62.5°	365.4
65°	327.3
67.5°	287.3
70°	247.4
72.5°	207.4
75°	167.5
77.5°	131.3
80°	95.1
82.5°	64.7
85°	38.1
87.5°	17.1
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	19.16	20.90	19.53	21.21	21.53	19.16	20.90	19.53	21.21	21.53
	3H	21.00	22.57	21.37	22.90	23.26	21.00	22.57	21.37	22.90	23.26
	4H	21.64	23.13	22.04	23.47	23.85	21.64	23.13	22.04	23.47	23.85
	6H	22.08	23.47	22.49	23.83	24.22	22.08	23.47	22.49	23.83	24.22
	8H	22.21	23.54	22.64	23.92	24.32	22.21	23.54	22.64	23.92	24.32
	12H	22.29	23.56	22.72	23.95	24.37	22.29	23.56	22.72	23.95	24.37
4H	2H	19.84	21.33	20.23	21.67	22.04	19.84	21.33	20.23	21.67	22.04
	3H	21.87	23.13	22.28	23.52	23.92	21.87	23.13	22.28	23.52	23.92
	4H	22.64	23.77	23.07	24.18	24.62	22.64	23.77	23.07	24.18	24.62
	6H	23.20	24.19	23.65	24.63	25.08	23.20	24.19	23.65	24.63	25.08
	8H	23.37	24.30	23.83	24.74	25.21	23.37	24.30	23.83	24.74	25.21
	12H	23.49	24.33	23.97	24.80	25.27	23.49	24.33	23.97	24.80	25.27
8H	4H	22.94	23.88	23.40	24.32	24.78	22.94	23.88	23.40	24.32	24.78
	6H	23.61	24.39	24.10	24.87	25.35	23.61	24.39	24.10	24.87	25.35
	8H	23.84	24.54	24.35	25.04	25.53	23.84	24.54	24.35	25.04	25.53
	12H	24.03	24.64	24.53	25.13	25.69	24.03	24.64	24.53	25.13	25.69
12H	4H	22.98	23.82	23.46	24.29	24.76	22.98	23.82	23.46	24.29	24.76
	6H	23.66	24.36	24.16	24.86	25.34	23.66	24.36	24.16	24.86	25.34
	8H	23.95	24.56	24.45	25.05	25.61	23.95	24.56	24.45	25.05	25.61