

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: P866380

Luminaire Tested: PRLX-2002-M-940-55L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866380
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-940-55L-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 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

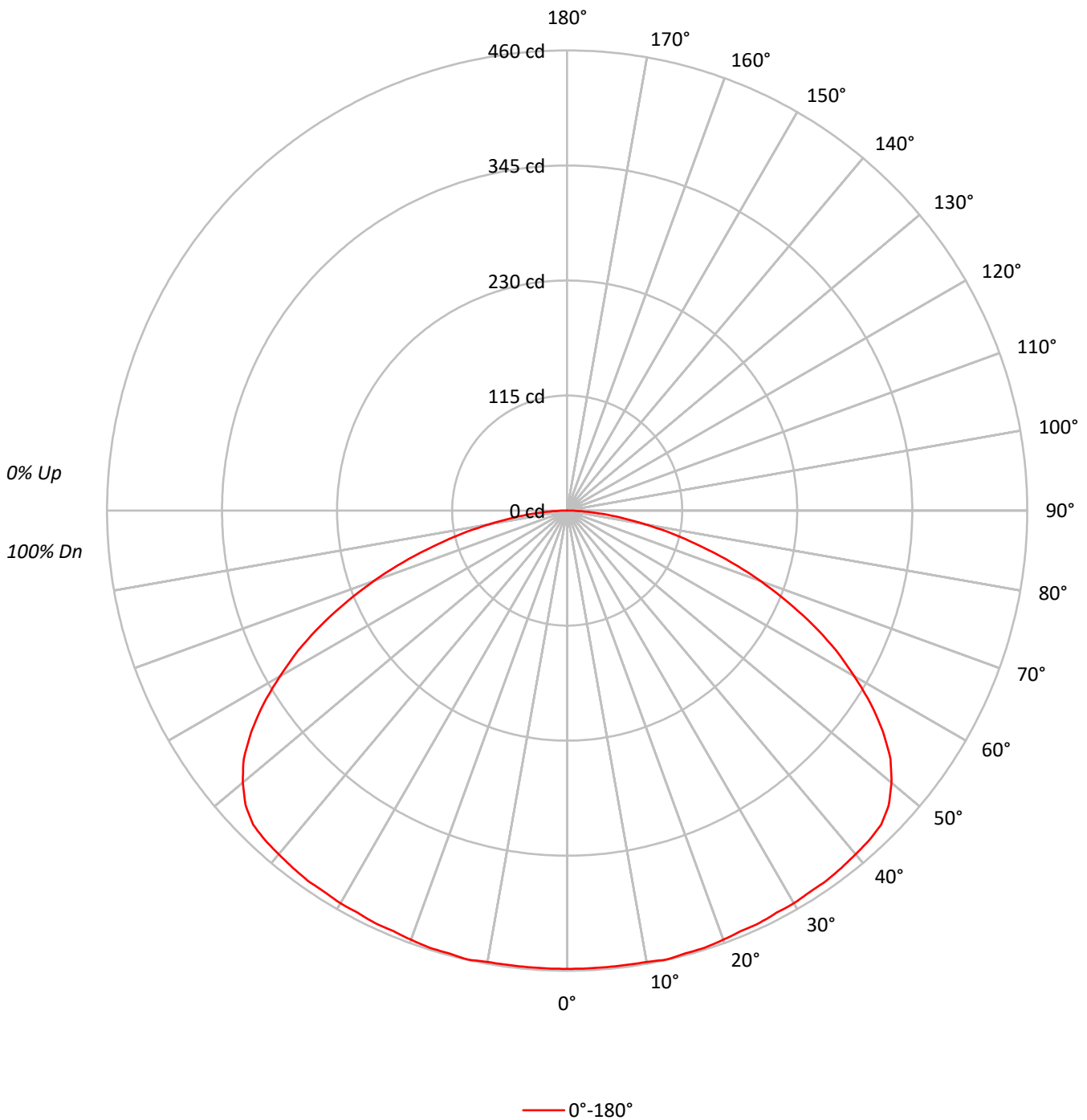
Lumens per Lamp: N/A
Luminaire Lumens: 1804.6 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 48.3
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	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°	3645
5°	3658
10°	3701
15°	3773
20°	3865
25°	3993
30°	4164
35°	4388
40°	4659
45°	4994
50°	5239
55°	5346
60°	5278
65°	5115
70°	4776
75°	4273
80°	3619
85°	2885

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 5346 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	2.4
10°-20°	129.9	7.2
20°-30°	210.3	11.7
30°-40°	283.4	15.7
40°-50°	341.1	18.9
50°-60°	342.5	19.0
60°-70°	267.7	14.8
70°-80°	148.2	8.2
80°-90°	37.8	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°	383.9	21.3
0°-40°	667.3	37.0
0°-60°	1350.9	74.9
0°-90°	1804.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	458	
5°	458	44
15°	458	130
25°	455	210
35°	452	283
45°	444	341
55°	385	343
65°	272	268
75°	139	148
85°	32	38
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	458.1
2.5°	458.1
5°	458.1
7.5°	458.1
10°	458.1
12.5°	459.7
15°	458.1
17.5°	458.1
20°	456.5
22.5°	454.9
25°	454.9
27.5°	453.3
30°	453.3
32.5°	451.8
35°	451.8
37.5°	450.2
40°	448.6
42.5°	447.0
45°	443.9
47.5°	436.0
50°	423.3
52.5°	407.5
55°	385.4
57.5°	360.2
60°	331.7
62.5°	303.3
65°	271.7
67.5°	238.5
70°	205.3
72.5°	172.2
75°	139.0
77.5°	109.0
80°	79.0
82.5°	53.7
85°	31.6
87.5°	14.2
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	18.52	20.25	18.88	20.57	20.88	18.52	20.25	18.88	20.57	20.88
	3H	20.35	21.93	20.73	22.25	22.61	20.35	21.93	20.73	22.25	22.61
	4H	20.99	22.48	21.39	22.83	23.20	20.99	22.48	21.39	22.83	23.20
	6H	21.44	22.82	21.85	23.18	23.57	21.44	22.82	21.85	23.18	23.57
	8H	21.57	22.89	21.99	23.28	23.67	21.57	22.89	21.99	23.28	23.67
	12H	21.65	22.92	22.08	23.30	23.73	21.65	22.92	22.08	23.30	23.73
4H	2H	19.19	20.68	19.59	21.03	21.40	19.19	20.68	19.59	21.03	21.40
	3H	21.23	22.48	21.64	22.88	23.28	21.23	22.48	21.64	22.88	23.28
	4H	21.99	23.13	22.42	23.54	23.97	21.99	23.13	22.42	23.54	23.97
	6H	22.55	23.55	23.00	23.99	24.44	22.55	23.55	23.00	23.99	24.44
	8H	22.72	23.65	23.18	24.10	24.56	22.72	23.65	23.18	24.10	24.56
	12H	22.84	23.68	23.32	24.16	24.62	22.84	23.68	23.32	24.16	24.62
8H	4H	22.30	23.23	22.75	23.67	24.13	22.30	23.23	22.75	23.67	24.13
	6H	22.96	23.74	23.45	24.23	24.70	22.96	23.74	23.45	24.23	24.70
	8H	23.20	23.90	23.70	24.40	24.88	23.20	23.90	23.70	24.40	24.88
	12H	23.38	24.00	23.88	24.49	25.04	23.38	24.00	23.88	24.49	25.04
12H	4H	22.33	23.17	22.81	23.65	24.11	22.33	23.17	22.81	23.65	24.11
	6H	23.01	23.71	23.52	24.21	24.70	23.01	23.71	23.52	24.21	24.70
	8H	23.30	23.92	23.80	24.41	24.96	23.30	23.92	23.80	24.41	24.96