

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: P866360

Luminaire Tested: PRLX-2002-M-940-25L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866360
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-940-25L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

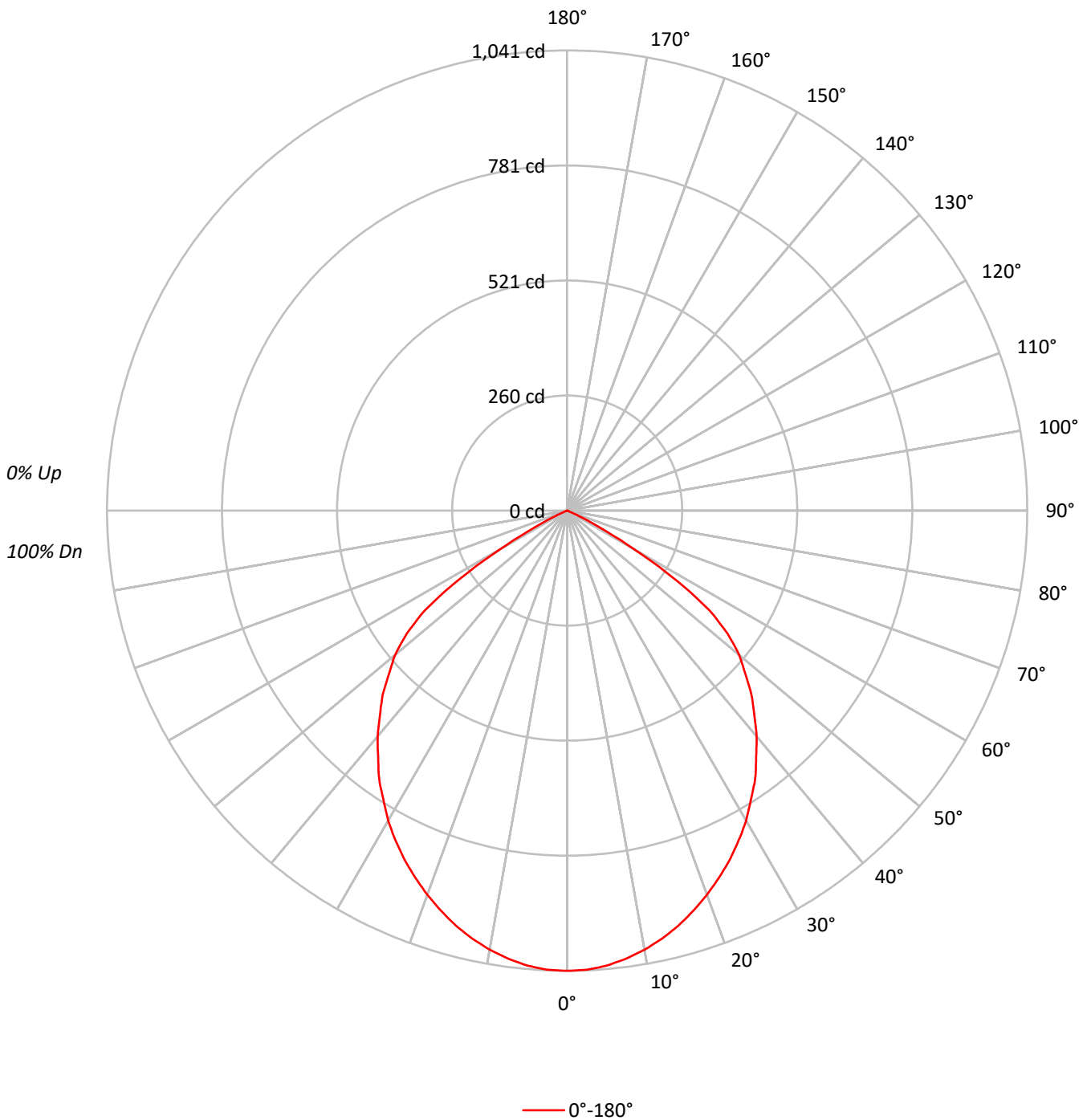
Lumens per Lamp: N/A
Luminaire Lumens: 2071.5 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 21.7
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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8283
5°	8251
10°	8150
15°	8007
20°	7830
25°	7645
30°	7440
35°	7204
40°	6927
45°	6640
50°	6291
55°	5448
60°	2788
65°	540
70°	51
75°	68
80°	64
85°	64

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6640 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	4.7
10°-20°	273.7	13.2
20°-30°	400.8	19.3
30°-40°	462.5	22.3
40°-50°	453.5	21.9
50°-60°	329.6	15.9
60°-70°	50.5	2.4
70°-80°	2.0	0.1
80°-90°	1.0	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°	772.4	37.3
0°-40°	1234.9	59.6
0°-60°	2018.0	97.4
0°-90°	2071.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2071.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1041	
5°	1033	98
15°	972	274
25°	871	401
35°	742	463
45°	590	454
55°	393	330
65°	29	51
75°	2	2
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1041.1
2.5°	1039.7
5°	1033.2
7.5°	1022.4
10°	1008.8
12.5°	991.6
15°	972.2
17.5°	949.2
20°	924.8
22.5°	898.2
25°	870.9
27.5°	840.8
30°	809.9
32.5°	774.0
35°	741.7
37.5°	702.2
40°	667.0
42.5°	626.8
45°	590.2
47.5°	546.4
50°	508.3
52.5°	457.4
55°	392.8
57.5°	290.1
60°	175.2
62.5°	83.3
65°	28.7
67.5°	7.2
70°	2.2
72.5°	2.2
75°	2.2
77.5°	1.4
80°	1.4
82.5°	1.4
85°	0.7
87.5°	0.7
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	16.78	18.19	17.15	18.51	18.82	16.78	18.19	17.15	18.51	18.82
	3H	16.66	17.90	17.04	18.23	18.60	16.66	17.90	17.04	18.23	18.60
	4H	16.60	17.75	17.00	18.10	18.48	16.60	17.75	17.00	18.10	18.48
	6H	16.53	17.58	16.94	17.95	18.34	16.53	17.58	16.94	17.95	18.34
	8H	16.48	17.49	16.91	17.88	18.28	16.48	17.49	16.91	17.88	18.28
	12H	16.45	17.40	16.88	17.78	18.21	16.45	17.40	16.88	17.78	18.21
4H	2H	16.62	17.77	17.02	18.12	18.50	16.62	17.77	17.02	18.12	18.50
	3H	16.50	17.43	16.92	17.83	18.24	16.50	17.43	16.92	17.83	18.24
	4H	16.42	17.24	16.86	17.66	18.11	16.42	17.24	16.86	17.66	18.11
	6H	16.35	17.05	16.81	17.50	17.97	16.35	17.05	16.81	17.50	17.97
	8H	16.29	16.95	16.76	17.40	17.87	16.29	16.95	16.76	17.40	17.87
	12H	16.25	16.83	16.73	17.32	17.79	16.25	16.83	16.73	17.32	17.79
8H	4H	16.29	16.95	16.76	17.40	17.87	16.29	16.95	16.76	17.40	17.87
	6H	16.19	16.73	16.69	17.23	17.71	16.19	16.73	16.69	17.23	17.71
	8H	16.12	16.62	16.64	17.13	17.62	16.12	16.62	16.64	17.13	17.62
	12H	16.07	16.52	16.59	17.01	17.58	16.07	16.52	16.59	17.01	17.58
12H	4H	16.25	16.83	16.73	17.31	17.79	16.25	16.83	16.73	17.31	17.79
	6H	16.12	16.62	16.64	17.13	17.62	16.12	16.62	16.64	17.13	17.62
	8H	16.07	16.52	16.59	17.01	17.58	16.07	16.52	16.59	17.01	17.58