

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: P865692

Luminaire Tested: PRLX-2002-S-940-05L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865692
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-940-05L-G-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

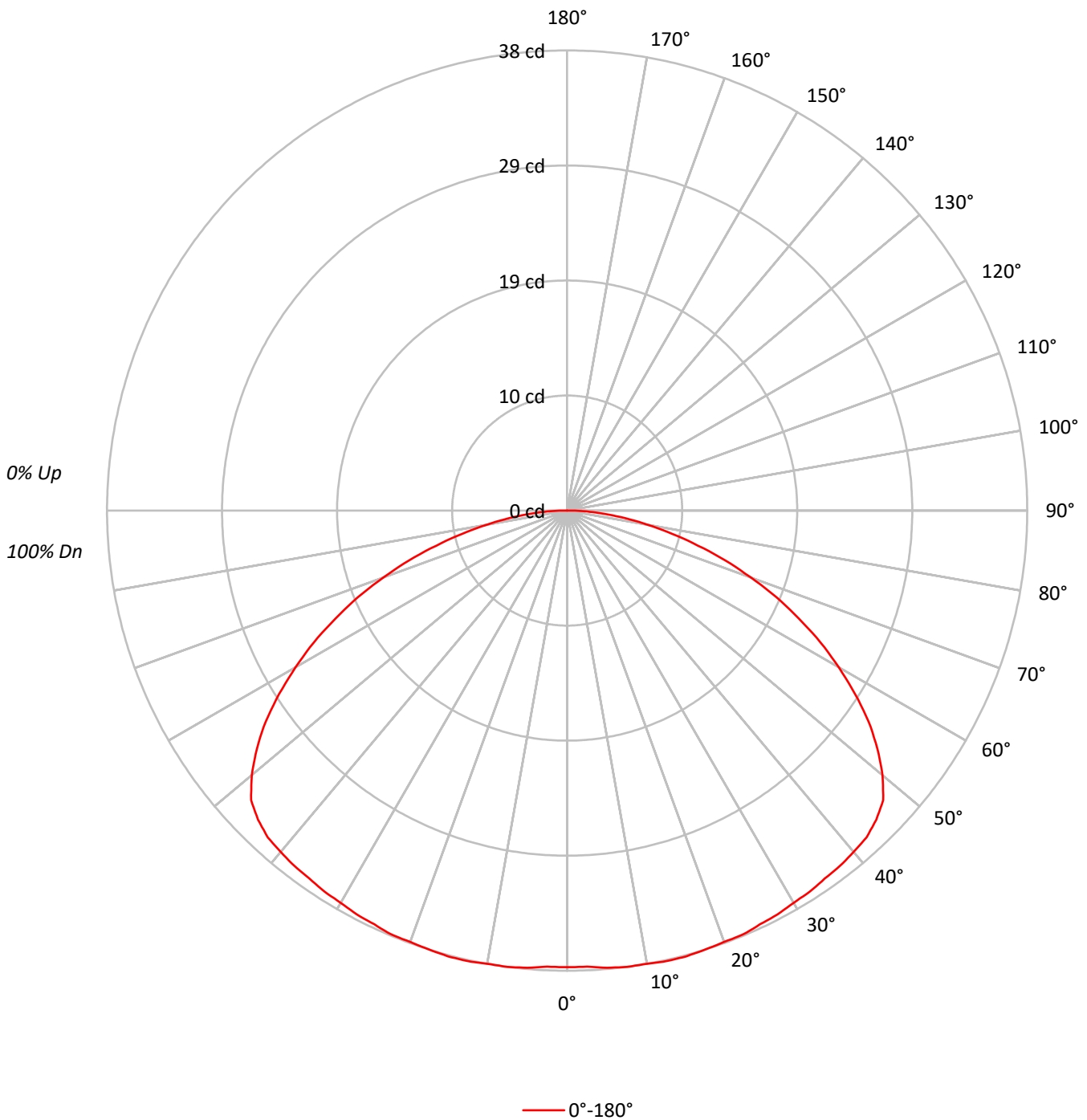
Lumens per Lamp: N/A
Luminaire Lumens: 146.3 lumens
Efficiency: N/A
Efficacy: 23.6 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.65
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 6.2
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: 0.333 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	89		92	89	87		89	86	84	82
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67	62	57	55
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59	53	48	46
5	73	60	50	43	71	59	50	43	56	48	42		54	47	42		52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	37		49	42	36		47	41	36	34
7	62	48	39	32	60	47	38	32	46	38	32		44	37	32		43	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28		40	33	28		39	33	28	26
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	23		34	27	22		33	27	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	708
5°	715
10°	725
15°	741
20°	758
25°	781
30°	811
35°	851
40°	902
45°	959
50°	994
55°	996
60°	973
65°	938
70°	884
75°	813
80°	736
85°	647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.6	2.5
10°-20°	10.8	7.4
20°-30°	17.4	11.9
30°-40°	23.3	15.9
40°-50°	27.8	19.0
50°-60°	27.0	18.5
60°-70°	20.9	14.3
70°-80°	11.9	8.2
80°-90°	3.5	2.4
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°	31.8	21.8
0°-40°	55.2	37.7
0°-60°	110.0	75.2
0°-90°	146.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	146.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	38	
5°	38	4
15°	38	11
25°	38	17
35°	37	23
45°	36	28
55°	30	27
65°	21	21
75°	11	12
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	37.7
2.5°	37.7
5°	37.9
7.5°	38.0
10°	38.0
12.5°	38.1
15°	38.1
17.5°	38.0
20°	37.9
22.5°	37.9
25°	37.7
27.5°	37.6
30°	37.4
32.5°	37.3
35°	37.1
37.5°	37.0
40°	36.8
42.5°	36.6
45°	36.1
47.5°	35.4
50°	34.0
52.5°	32.3
55°	30.4
57.5°	28.2
60°	25.9
62.5°	23.6
65°	21.1
67.5°	18.7
70°	16.1
72.5°	13.7
75°	11.2
77.5°	8.9
80°	6.8
82.5°	4.8
85°	3.0
87.5°	1.6
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	12.54	14.27	12.91	14.58	14.90	12.54	14.27	12.91	14.58	14.90
	3H	14.38	15.95	14.75	16.27	16.63	14.38	15.95	14.75	16.27	16.63
	4H	15.05	16.53	15.45	16.88	17.25	15.05	16.53	15.45	16.88	17.25
	6H	15.55	16.92	15.96	17.29	17.68	15.55	16.92	15.96	17.29	17.68
	8H	15.71	17.03	16.13	17.42	17.81	15.71	17.03	16.13	17.42	17.81
	12H	15.83	17.09	16.26	17.47	17.90	15.83	17.09	16.26	17.47	17.90
4H	2H	13.20	14.68	13.60	15.03	15.40	13.20	14.68	13.60	15.03	15.40
	3H	15.25	16.50	15.66	16.90	17.30	15.25	16.50	15.66	16.90	17.30
	4H	16.05	17.18	16.48	17.60	18.03	16.05	17.18	16.48	17.60	18.03
	6H	16.68	17.67	17.13	18.11	18.56	16.68	17.67	17.13	18.11	18.56
	8H	16.89	17.82	17.35	18.26	18.73	16.89	17.82	17.35	18.26	18.73
	12H	17.06	17.90	17.54	18.37	18.84	17.06	17.90	17.54	18.37	18.84
8H	4H	16.38	17.31	16.83	17.75	18.21	16.38	17.31	16.83	17.75	18.21
	6H	17.12	17.90	17.62	18.39	18.86	17.12	17.90	17.62	18.39	18.86
	8H	17.42	18.11	17.92	18.62	19.10	17.42	18.11	17.92	18.62	19.10
	12H	17.66	18.28	18.16	18.76	19.32	17.66	18.28	18.16	18.76	19.32
12H	4H	16.42	17.26	16.89	17.73	18.20	16.42	17.26	16.89	17.73	18.20
	6H	17.19	17.89	17.69	18.39	18.87	17.19	17.89	17.69	18.39	18.87
	8H	17.54	18.16	18.04	18.65	19.20	17.54	18.16	18.04	18.65	19.20