

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: P867103

Luminaire Tested: PRLX-2002-L-935-83L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-80)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-935-83L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

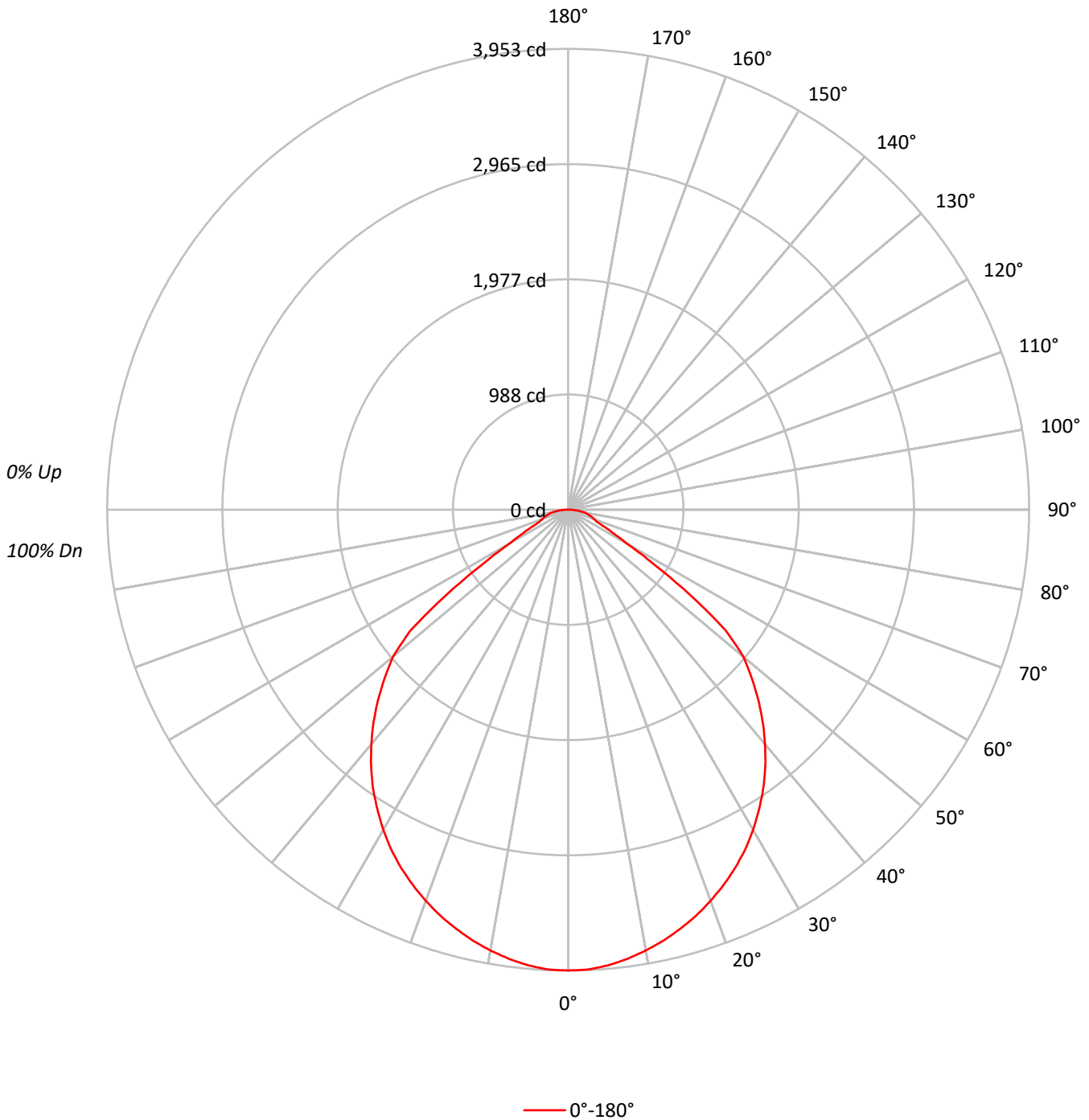
Lumens per Lamp: N/A
Luminaire Lumens: 8350.0 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
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	111	107	103	100	108	105	101	99	101	98	96	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46
7	70	58	50	44	69	57	49	44	56	49	44	54	48	43	53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	19503
5°	19432
10°	19231
15°	18999
20°	18743
25°	18452
30°	18060
35°	17568
40°	16911
45°	16074
50°	15040
55°	11016
60°	5758
65°	3837
70°	3430
75°	3647
80°	3986
85°	4393

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16074 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.8	4.5
10°-20°	1049.1	12.6
20°-30°	1560.1	18.7
30°-40°	1821.1	21.8
40°-50°	1774.2	21.2
50°-60°	1136.6	13.6
60°-70°	353.9	4.2
70°-80°	201.6	2.4
80°-90°	81.6	1.0
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°	2981.0	35.7
0°-40°	4802.1	57.5
0°-60°	7712.9	92.4
0°-90°	8350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8350.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3953	
5°	3924	372
15°	3720	1049
25°	3390	1560
35°	2917	1821
45°	2304	1774
55°	1281	1137
65°	329	354
75°	191	202
85°	78	82
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3953.0
2.5°	3947.1
5°	3923.5
7.5°	3886.6
10°	3838.5
12.5°	3784.6
15°	3719.6
17.5°	3650.2
20°	3569.7
22.5°	3483.3
25°	3389.5
27.5°	3286.1
30°	3170.1
32.5°	3046.8
35°	2916.8
37.5°	2776.4
40°	2625.7
42.5°	2469.9
45°	2303.7
47.5°	2133.8
50°	1959.5
52.5°	1705.4
55°	1280.7
57.5°	867.1
60°	583.5
62.5°	435.0
65°	328.7
67.5°	260.7
70°	237.8
72.5°	216.4
75°	191.3
77.5°	166.9
80°	140.3
82.5°	110.8
85°	77.6
87.5°	41.4
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	17.87	19.33	18.24	19.64	19.95	17.87	19.33	18.24	19.64	19.95
	3H	18.29	19.58	18.67	19.91	20.27	18.29	19.58	18.67	19.91	20.27
	4H	18.57	19.78	18.97	20.12	20.51	18.57	19.78	18.97	20.12	20.51
	6H	18.89	20.00	19.30	20.37	20.76	18.89	20.00	19.30	20.37	20.76
	8H	19.04	20.09	19.46	20.48	20.88	19.04	20.09	19.46	20.48	20.88
	12H	19.16	20.17	19.59	20.55	20.98	19.16	20.17	19.59	20.55	20.98
4H	2H	17.93	19.13	18.33	19.48	19.86	17.93	19.13	18.33	19.48	19.86
	3H	18.54	19.53	18.96	19.93	20.33	18.54	19.53	18.96	19.93	20.33
	4H	18.97	19.85	19.40	20.27	20.71	18.97	19.85	19.40	20.27	20.71
	6H	19.46	20.22	19.92	20.67	21.13	19.46	20.22	19.92	20.67	21.13
	8H	19.68	20.40	20.15	20.84	21.31	19.68	20.40	20.15	20.84	21.31
	12H	19.88	20.52	20.37	21.00	21.47	19.88	20.52	20.37	21.00	21.47
8H	4H	19.11	19.83	19.58	20.27	20.74	19.11	19.83	19.58	20.27	20.74
	6H	19.74	20.34	20.24	20.83	21.31	19.74	20.34	20.24	20.83	21.31
	8H	20.06	20.60	20.58	21.11	21.60	20.06	20.60	20.58	21.11	21.60
	12H	20.37	20.85	20.88	21.34	21.91	20.37	20.85	20.88	21.34	21.91
12H	4H	19.13	19.76	19.61	20.24	20.72	19.13	19.76	19.61	20.24	20.72
	6H	19.79	20.33	20.31	20.84	21.33	19.79	20.33	20.31	20.84	21.33
	8H	20.17	20.66	20.69	21.15	21.72	20.17	20.66	20.69	21.15	21.72