

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: P867427

Luminaire Tested: PRLX-2004-L-940-83L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-72)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-940-83L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

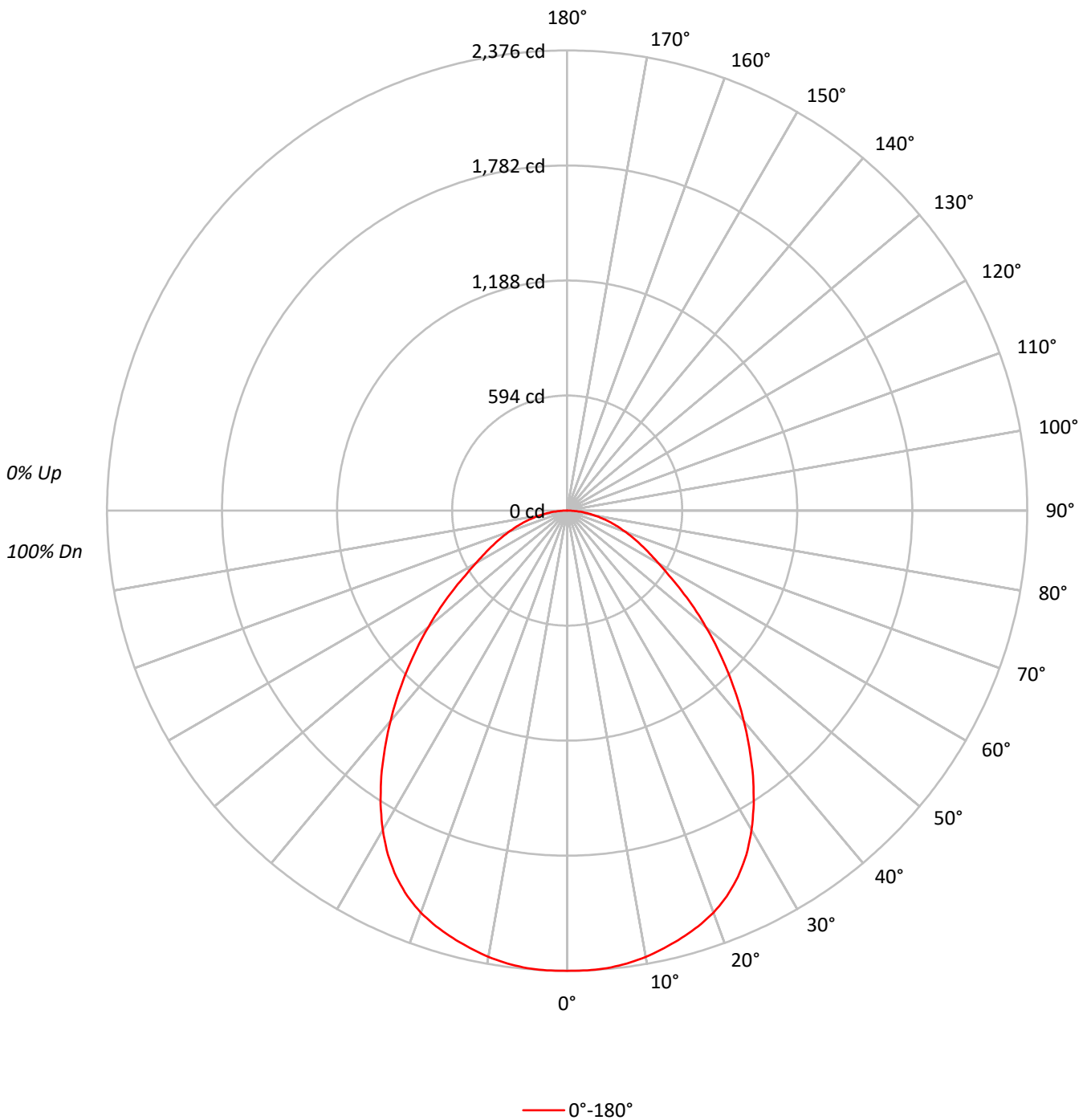
Lumens per Lamp: N/A
Luminaire Lumens: 5159.5 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.22
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (Ain): 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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	88	82	99	92	86	81	88	84	80	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	56	44	36	32	43	36	32	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	11725
5°	11747
10°	11725
15°	11670
20°	11599
25°	11363
30°	10851
35°	10074
40°	9143
45°	8162
50°	7174
55°	6195
60°	5372
65°	4934
70°	4605
75°	4322
80°	4074
85°	3844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8162 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.4	4.4
10°-20°	644.7	12.5
20°-30°	956.8	18.5
30°-40°	1042.1	20.2
40°-50°	903.5	17.5
50°-60°	649.3	12.6
60°-70°	421.1	8.2
70°-80°	241.0	4.7
80°-90°	75.6	1.5
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°	1826.9	35.4
0°-40°	2869.0	55.6
0°-60°	4421.9	85.7
0°-90°	5159.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5159.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2376	
5°	2372	225
15°	2285	645
25°	2087	957
35°	1672	1042
45°	1170	904
55°	720	649
65°	423	421
75°	227	241
85°	68	76
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2376.5
2.5°	2376.5
5°	2371.9
7.5°	2359.5
10°	2340.3
12.5°	2314.0
15°	2284.7
17.5°	2250.8
20°	2209.2
22.5°	2156.0
25°	2087.3
27.5°	2004.1
30°	1904.6
32.5°	1792.8
35°	1672.5
37.5°	1546.0
40°	1419.6
42.5°	1294.7
45°	1169.7
47.5°	1051.8
50°	934.6
52.5°	826.6
55°	720.2
57.5°	623.8
60°	544.4
62.5°	479.6
65°	422.6
67.5°	368.6
70°	319.2
72.5°	271.4
75°	226.7
77.5°	184.3
80°	143.4
82.5°	104.9
85°	67.9
87.5°	33.2
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	17.31	18.80	17.67	19.12	19.43	17.31	18.80	17.67	19.12	19.43
	3H	18.82	20.16	19.20	20.49	20.85	18.82	20.16	19.20	20.49	20.85
	4H	19.42	20.68	19.82	21.03	21.41	19.42	20.68	19.82	21.03	21.41
	6H	19.89	21.06	20.31	21.43	21.82	19.89	21.06	20.31	21.43	21.82
	8H	20.06	21.17	20.49	21.56	21.96	20.06	21.17	20.49	21.56	21.96
	12H	20.19	21.25	20.62	21.63	22.06	20.19	21.25	20.62	21.63	22.06
4H	2H	17.81	19.07	18.21	19.42	19.80	17.81	19.07	18.21	19.42	19.80
	3H	19.56	20.61	19.97	21.01	21.41	19.56	20.61	19.97	21.01	21.41
	4H	20.29	21.24	20.73	21.65	22.09	20.29	21.24	20.73	21.65	22.09
	6H	20.91	21.73	21.37	22.18	22.64	20.91	21.73	21.37	22.18	22.64
	8H	21.13	21.90	21.60	22.35	22.81	21.13	21.90	21.60	22.35	22.81
	12H	21.31	21.99	21.79	22.47	22.94	21.31	21.99	21.79	22.47	22.94
8H	4H	20.57	21.34	21.03	21.78	22.25	20.57	21.34	21.03	21.78	22.25
	6H	21.32	21.96	21.82	22.45	22.92	21.32	21.96	21.82	22.45	22.92
	8H	21.62	22.20	22.14	22.71	23.19	21.62	22.20	22.14	22.71	23.19
	12H	21.89	22.39	22.40	22.89	23.45	21.89	22.39	22.40	22.89	23.45
12H	4H	20.60	21.28	21.08	21.76	22.23	20.60	21.28	21.08	21.76	22.23
	6H	21.37	21.95	21.89	22.46	22.95	21.37	21.95	21.89	22.46	22.95
	8H	21.74	22.25	22.25	22.74	23.31	21.74	22.25	22.25	22.74	23.31