

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: P866911

Luminaire Tested: PRLX-2001-L-940-83L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866911
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-76)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-L-940-83L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

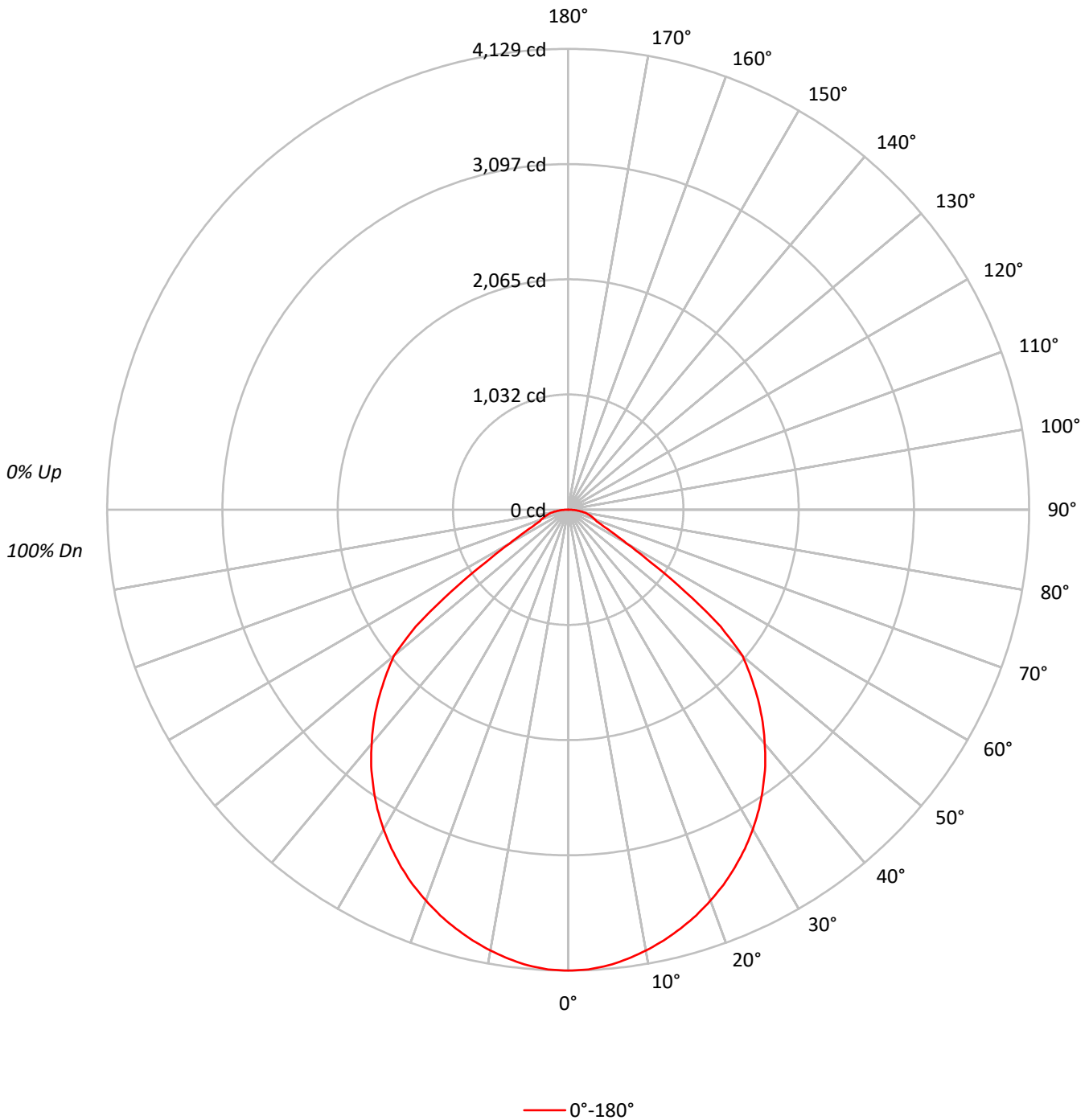
Lumens per Lamp: N/A
Luminaire Lumens: 8682.8 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P866911

CATALOG NUMBER: PRLX-2001-L-940-83L-L-X-X-WHHR-X

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	70	64	86	76	69	63	74	67	62		71	66	62		69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63	58	54	52
6	75	63	55	50	74	63	55	49	61	54	49		59	53	49		58	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	40		50	44	39		49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45	40	36	34
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42	37	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	22574
5°	22495
10°	22262
15°	21991
20°	21681
25°	21321
30°	20872
35°	20296
40°	19552
45°	18582
50°	17340
55°	12178
60°	6593
65°	4489
70°	4079
75°	4332
80°	4659
85°	4980

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18582 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.4	4.5
10°-20°	1095.7	12.6
20°-30°	1627.5	18.7
30°-40°	1900.2	21.9
40°-50°	1849.6	21.3
50°-60°	1150.9	13.3
60°-70°	371.0	4.3
70°-80°	215.2	2.5
80°-90°	84.1	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°	3111.6	35.8
0°-40°	5011.8	57.7
0°-60°	8012.4	92.3
0°-90°	8682.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8682.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4129	
5°	4099	388
15°	3886	1096
25°	3535	1627
35°	3041	1900
45°	2404	1850
55°	1278	1151
65°	347	371
75°	205	215
85°	79	84
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	4129.2
2.5°	4124.5
5°	4099.1
7.5°	4060.5
10°	4010.4
12.5°	3953.4
15°	3885.5
17.5°	3811.5
20°	3726.7
22.5°	3637.2
25°	3534.7
27.5°	3425.2
30°	3306.4
32.5°	3180.7
35°	3041.2
37.5°	2898.5
40°	2739.7
42.5°	2578.5
45°	2403.5
47.5°	2220.7
50°	2038.8
52.5°	1721.1
55°	1277.7
57.5°	870.6
60°	603.0
62.5°	450.3
65°	347.0
67.5°	277.6
70°	255.2
72.5°	230.6
75°	205.1
77.5°	178.1
80°	148.0
82.5°	115.7
85°	79.4
87.5°	40.1
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	18.13	19.59	18.50	19.90	20.21	18.13	19.59	18.50	19.90	20.21
	3H	18.61	19.90	18.99	20.23	20.59	18.61	19.90	18.99	20.23	20.59
	4H	18.93	20.14	19.34	20.49	20.87	18.93	20.14	19.34	20.49	20.87
	6H	19.28	20.39	19.70	20.76	21.15	19.28	20.39	19.70	20.76	21.15
	8H	19.44	20.49	19.87	20.88	21.28	19.44	20.49	19.87	20.88	21.28
	12H	19.56	20.57	20.00	20.95	21.38	19.56	20.57	20.00	20.95	21.38
4H	2H	18.21	19.42	18.61	19.77	20.15	18.21	19.42	18.61	19.77	20.15
	3H	18.91	19.89	19.32	20.29	20.70	18.91	19.89	19.32	20.29	20.70
	4H	19.38	20.26	19.81	20.68	21.12	19.38	20.26	19.81	20.68	21.12
	6H	19.91	20.67	20.36	21.11	21.57	19.91	20.67	20.36	21.11	21.57
	8H	20.13	20.85	20.60	21.29	21.76	20.13	20.85	20.60	21.29	21.76
	12H	20.33	20.97	20.82	21.45	21.92	20.33	20.97	20.82	21.45	21.92
8H	4H	19.54	20.26	20.01	20.70	21.17	19.54	20.26	20.01	20.70	21.17
	6H	20.21	20.80	20.71	21.30	21.78	20.21	20.80	20.71	21.30	21.78
	8H	20.54	21.07	21.05	21.59	22.08	20.54	21.07	21.05	21.59	22.08
	12H	20.84	21.32	21.35	21.82	22.38	20.84	21.32	21.35	21.82	22.38
12H	4H	19.56	20.20	20.05	20.68	21.15	19.56	20.20	20.05	20.68	21.15
	6H	20.26	20.80	20.78	21.31	21.80	20.26	20.80	20.78	21.31	21.80
	8H	20.65	21.13	21.17	21.63	22.19	20.65	21.13	21.17	21.63	22.19