

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: P865720

Luminaire Tested: PRLX-2002-S-940-20L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-940-20L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

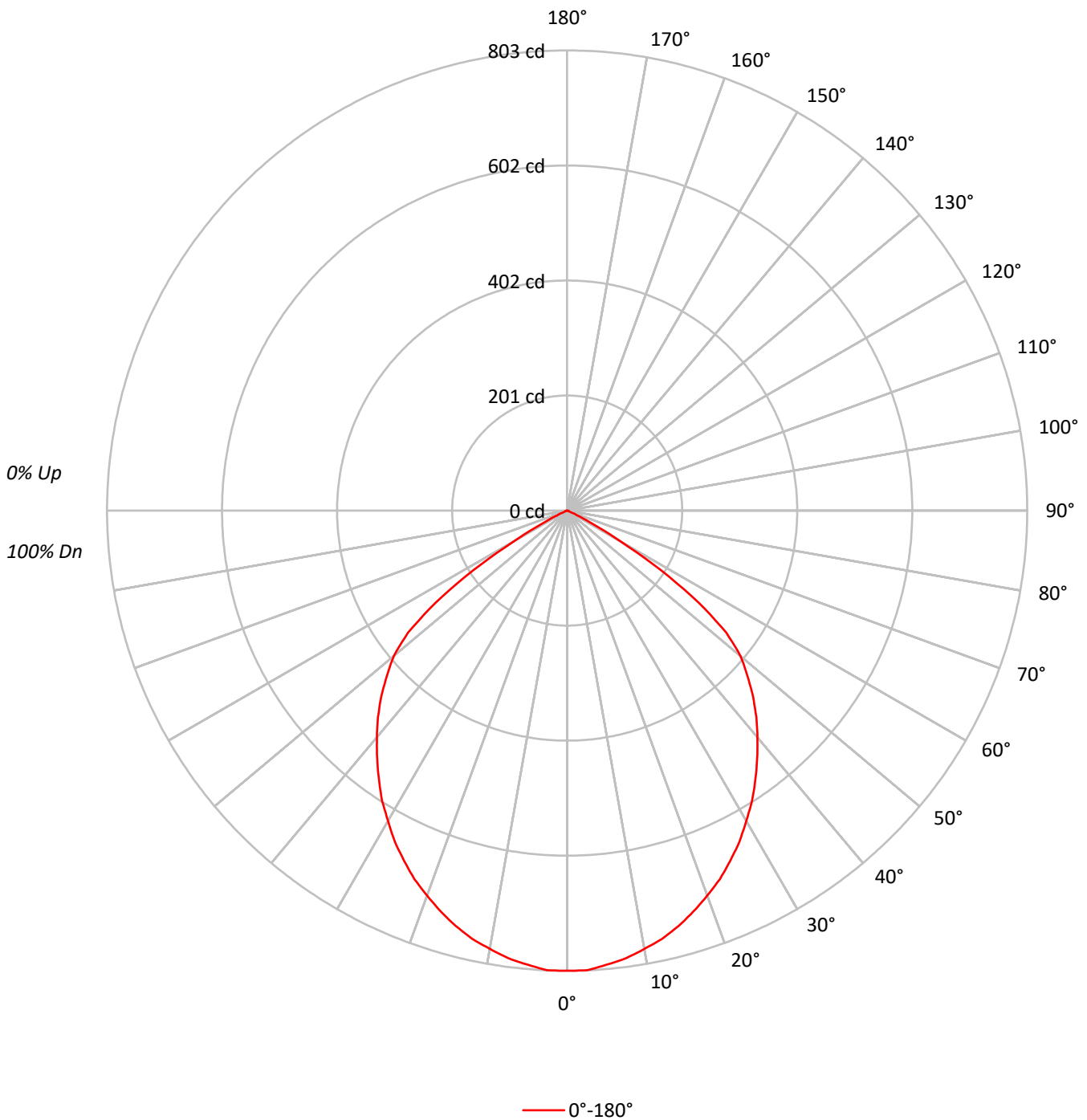
Lumens per Lamp: N/A
Luminaire Lumens: 1581.5 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.28
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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: 0.333 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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	51	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15082
5°	14998
10°	14815
15°	14595
20°	14291
25°	13963
30°	13559
35°	13133
40°	12665
45°	12180
50°	11540
55°	9193
60°	4009
65°	831
70°	104
75°	138
80°	206
85°	409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	4.8
10°-20°	211.4	13.4
20°-30°	310.2	19.6
30°-40°	358.1	22.6
40°-50°	352.9	22.3
50°-60°	238.8	15.1
60°-70°	30.9	2.0
70°-80°	2.0	0.1
80°-90°	1.8	0.1
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°	596.9	37.7
0°-40°	955.1	60.4
0°-60°	1546.8	97.8
0°-90°	1581.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1581.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	803	
5°	795	75
15°	750	211
25°	674	310
35°	573	358
45°	458	353
55°	281	239
65°	19	31
75°	2	2
85°	2	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	802.9
2.5°	802.9
5°	795.4
7.5°	787.9
10°	776.7
12.5°	765.4
15°	750.5
17.5°	733.6
20°	714.9
22.5°	696.2
25°	673.7
27.5°	651.3
30°	625.1
32.5°	600.8
35°	572.7
37.5°	544.6
40°	516.5
42.5°	488.5
45°	458.5
47.5°	426.7
50°	394.9
52.5°	350.0
55°	280.7
57.5°	194.6
60°	106.7
62.5°	50.5
65°	18.7
67.5°	3.7
70°	1.9
72.5°	1.9
75°	1.9
77.5°	1.9
80°	1.9
82.5°	1.9
85°	1.9
87.5°	1.9
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	17.91	19.31	18.28	19.63	19.94	17.91	19.31	18.28	19.63	19.94
	3H	17.79	19.02	18.17	19.35	19.72	17.79	19.02	18.17	19.35	19.72
	4H	17.73	18.87	18.13	19.22	19.60	17.73	18.87	18.13	19.22	19.60
	6H	17.65	18.70	18.07	19.07	19.46	17.65	18.70	18.07	19.07	19.46
	8H	17.62	18.61	18.04	19.00	19.40	17.62	18.61	18.04	19.00	19.40
	12H	17.58	18.53	18.01	18.91	19.34	17.58	18.53	18.01	18.91	19.34
4H	2H	17.75	18.89	18.15	19.24	19.62	17.75	18.89	18.15	19.24	19.62
	3H	17.63	18.55	18.04	18.95	19.35	17.63	18.55	18.04	18.95	19.35
	4H	17.55	18.36	17.98	18.78	19.22	17.55	18.36	17.98	18.78	19.22
	6H	17.47	18.17	17.93	18.62	19.09	17.47	18.17	17.93	18.62	19.09
	8H	17.42	18.07	17.89	18.52	18.99	17.42	18.07	17.89	18.52	18.99
	12H	17.38	17.96	17.86	18.44	18.91	17.38	17.96	17.86	18.44	18.91
8H	4H	17.41	18.07	17.88	18.52	18.99	17.41	18.07	17.88	18.52	18.99
	6H	17.31	17.85	17.81	18.35	18.83	17.31	17.85	17.81	18.35	18.83
	8H	17.25	17.74	17.77	18.26	18.75	17.25	17.74	17.77	18.26	18.75
	12H	17.21	17.65	17.72	18.14	18.71	17.21	17.65	17.72	18.14	18.71
12H	4H	17.37	17.95	17.85	18.43	18.91	17.37	17.95	17.85	18.43	18.91
	6H	17.25	17.74	17.77	18.25	18.74	17.25	17.74	17.77	18.25	18.74
	8H	17.20	17.64	17.71	18.14	18.71	17.20	17.64	17.71	18.14	18.71