

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: P865718

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-940-20L-G-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

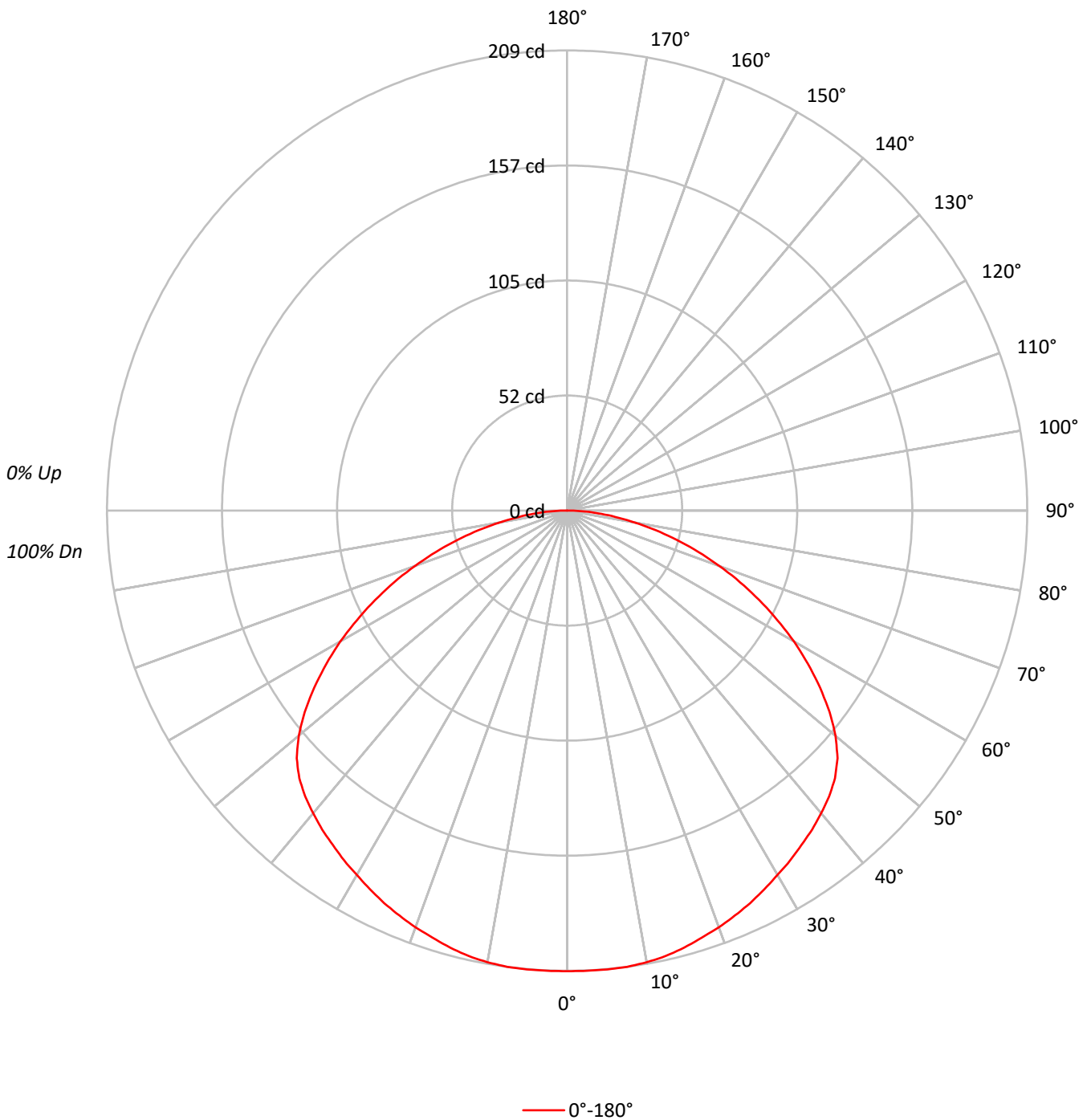
Lumens per Lamp: N/A
Luminaire Lumens: 708.7 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.53
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	54	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3930
5°	3945
10°	3973
15°	3996
20°	4026
25°	4077
30°	4145
35°	4254
40°	4402
45°	4569
50°	4649
55°	4591
60°	4471
65°	4276
70°	4037
75°	3738
80°	3386
85°	3060

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 4649 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.9	2.8
10°-20°	58.1	8.2
20°-30°	90.8	12.8
30°-40°	116.4	16.4
40°-50°	132.2	18.7
50°-60°	125.1	17.7
60°-70°	95.3	13.4
70°-80°	54.7	7.7
80°-90°	16.1	2.3
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°	168.8	23.8
0°-40°	285.2	40.2
0°-60°	542.5	76.6
0°-90°	708.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	708.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	209	
5°	209	20
15°	206	58
25°	197	91
35°	186	116
45°	172	132
55°	140	125
65°	96	95
75°	52	55
85°	14	16
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	209.2
2.5°	209.2
5°	209.2
7.5°	209.0
10°	208.3
12.5°	207.2
15°	205.5
17.5°	203.4
20°	201.4
22.5°	199.1
25°	196.7
27.5°	193.9
30°	191.1
32.5°	188.5
35°	185.5
37.5°	182.7
40°	179.5
42.5°	176.1
45°	172.0
47.5°	166.6
50°	159.1
52.5°	150.3
55°	140.2
57.5°	129.7
60°	119.0
62.5°	107.6
65°	96.2
67.5°	85.0
70°	73.5
72.5°	62.5
75°	51.5
77.5°	41.2
80°	31.3
82.5°	22.1
85°	14.2
87.5°	7.3
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	17.70	19.40	18.07	19.71	20.03	17.70	19.40	18.07	19.71	20.03
	3H	19.51	21.04	19.88	21.37	21.73	19.51	21.04	19.88	21.37	21.73
	4H	20.18	21.63	20.58	21.98	22.35	20.18	21.63	20.58	21.98	22.35
	6H	20.68	22.03	21.09	22.39	22.78	20.68	22.03	21.09	22.39	22.78
	8H	20.85	22.14	21.27	22.52	22.92	20.85	22.14	21.27	22.52	22.92
	12H	20.97	22.20	21.40	22.58	23.01	20.97	22.20	21.40	22.58	23.01
4H	2H	18.34	19.80	18.74	20.14	20.52	18.34	19.80	18.74	20.14	20.52
	3H	20.37	21.59	20.78	21.99	22.39	20.37	21.59	20.78	21.99	22.39
	4H	21.17	22.28	21.60	22.69	23.12	21.17	22.28	21.60	22.69	23.12
	6H	21.80	22.77	22.26	23.21	23.67	21.80	22.77	22.26	23.21	23.67
	8H	22.02	22.93	22.48	23.37	23.83	22.02	22.93	22.48	23.37	23.83
	12H	22.19	23.01	22.67	23.48	23.95	22.19	23.01	22.67	23.48	23.95
8H	4H	21.49	22.40	21.95	22.84	23.31	21.49	22.40	21.95	22.84	23.31
	6H	22.25	23.01	22.74	23.50	23.97	22.25	23.01	22.74	23.50	23.97
	8H	22.54	23.22	23.05	23.73	24.21	22.54	23.22	23.05	23.73	24.21
	12H	22.79	23.39	23.30	23.88	24.44	22.79	23.39	23.30	23.88	24.44
12H	4H	21.53	22.35	22.01	22.83	23.29	21.53	22.35	22.01	22.83	23.29
	6H	22.31	23.00	22.82	23.50	23.98	22.31	23.00	22.82	23.50	23.98
	8H	22.66	23.27	23.17	23.76	24.32	22.66	23.27	23.17	23.76	24.32