

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: P867170

Luminaire Tested: PRLX-2002-L-940-83L-G-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-70)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-940-83L-G-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

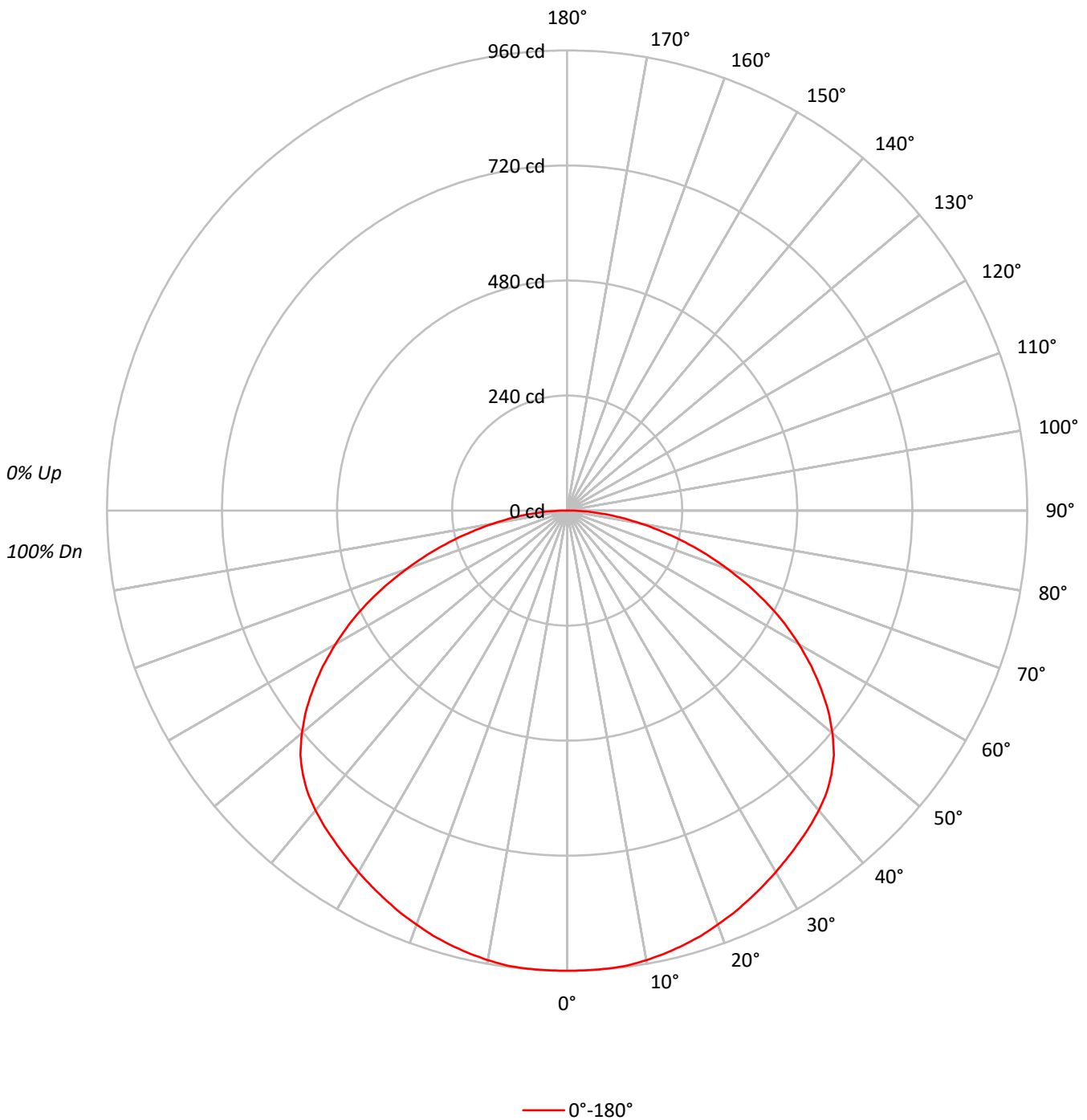
Lumens per Lamp: N/A
Luminaire Lumens: 3283.1 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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: 0.5 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	108	103	98	94	105	101	96	93	96	93	90		92	89	87		89	86	84	82
2	98	89	82	75	95	87	80	75	83	78	73		80	75	71		77	73	69	67
3	88	77	69	62	86	76	68	61	73	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	37		50	42	37		48	42	37	35
7	63	49	40	33	61	48	39	33	46	39	33		45	38	33		44	37	32	30
8	58	44	36	29	57	44	35	29	42	35	29		41	34	29		40	33	29	27
9	54	41	32	26	53	40	32	26	39	31	26		38	31	26		37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	23		34	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4736
5°	4751
10°	4771
15°	4793
20°	4826
25°	4878
30°	4960
35°	5085
40°	5259
45°	5440
50°	5546
55°	5559
60°	5509
65°	5392
70°	5138
75°	4836
80°	4447
85°	4104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 5568 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	2.8
10°-20°	265.3	8.1
20°-30°	413.9	12.6
30°-40°	529.6	16.1
40°-50°	600.1	18.3
50°-60°	576.7	17.6
60°-70°	455.7	13.9
70°-80°	268.7	8.2
80°-90°	81.7	2.5
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°	770.6	23.5
0°-40°	1300.2	39.6
0°-60°	2477.0	75.4
0°-90°	3283.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3283.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	960	
5°	959	91
15°	938	265
25°	896	414
35°	844	530
45°	780	600
55°	646	577
65°	462	456
75°	254	269
85°	72	82
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	960.0
2.5°	960.0
5°	959.2
7.5°	957.7
10°	952.3
12.5°	946.1
15°	938.4
17.5°	929.9
20°	919.1
22.5°	908.3
25°	896.0
27.5°	883.7
30°	870.6
32.5°	857.5
35°	844.3
37.5°	831.2
40°	816.6
42.5°	800.4
45°	779.6
47.5°	754.9
50°	722.5
52.5°	687.0
55°	646.2
57.5°	603.8
60°	558.3
62.5°	512.0
65°	461.9
67.5°	410.2
70°	356.2
72.5°	305.4
75°	253.7
77.5°	203.6
80°	156.5
82.5°	112.6
85°	72.5
87.5°	37.0
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	18.41	20.11	18.77	20.43	20.74	18.41	20.11	18.77	20.43	20.74
	3H	20.32	21.87	20.70	22.20	22.56	20.32	21.87	20.70	22.20	22.56
	4H	21.05	22.51	21.44	22.86	23.23	21.05	22.51	21.44	22.86	23.23
	6H	21.59	22.95	22.00	23.31	23.70	21.59	22.95	22.00	23.31	23.70
	8H	21.78	23.08	22.20	23.47	23.87	21.78	23.08	22.20	23.47	23.87
	12H	21.92	23.16	22.34	23.55	23.97	21.92	23.16	22.34	23.55	23.97
4H	2H	19.09	20.56	19.49	20.90	21.28	19.09	20.56	19.49	20.90	21.28
	3H	21.22	22.46	21.63	22.85	23.25	21.22	22.46	21.63	22.85	23.25
	4H	22.08	23.20	22.51	23.61	24.04	22.08	23.20	22.51	23.61	24.04
	6H	22.75	23.74	23.21	24.18	24.63	22.75	23.74	23.21	24.18	24.63
	8H	23.00	23.92	23.45	24.36	24.82	23.00	23.92	23.45	24.36	24.82
	12H	23.19	24.02	23.66	24.49	24.96	23.19	24.02	23.66	24.49	24.96
8H	4H	22.42	23.34	22.88	23.78	24.25	22.42	23.34	22.88	23.78	24.25
	6H	23.23	24.00	23.72	24.49	24.96	23.23	24.00	23.72	24.49	24.96
	8H	23.55	24.24	24.06	24.75	25.23	23.55	24.24	24.06	24.75	25.23
	12H	23.83	24.44	24.33	24.93	25.49	23.83	24.44	24.33	24.93	25.49
12H	4H	22.47	23.30	22.94	23.77	24.24	22.47	23.30	22.94	23.77	24.24
	6H	23.30	23.99	23.81	24.50	24.98	23.30	23.99	23.81	24.50	24.98
	8H	23.69	24.30	24.19	24.79	25.35	23.69	24.30	24.19	24.79	25.35