

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: P866375

Luminaire Tested: PRLX-2002-M-940-45L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-38)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-940-45L-G-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

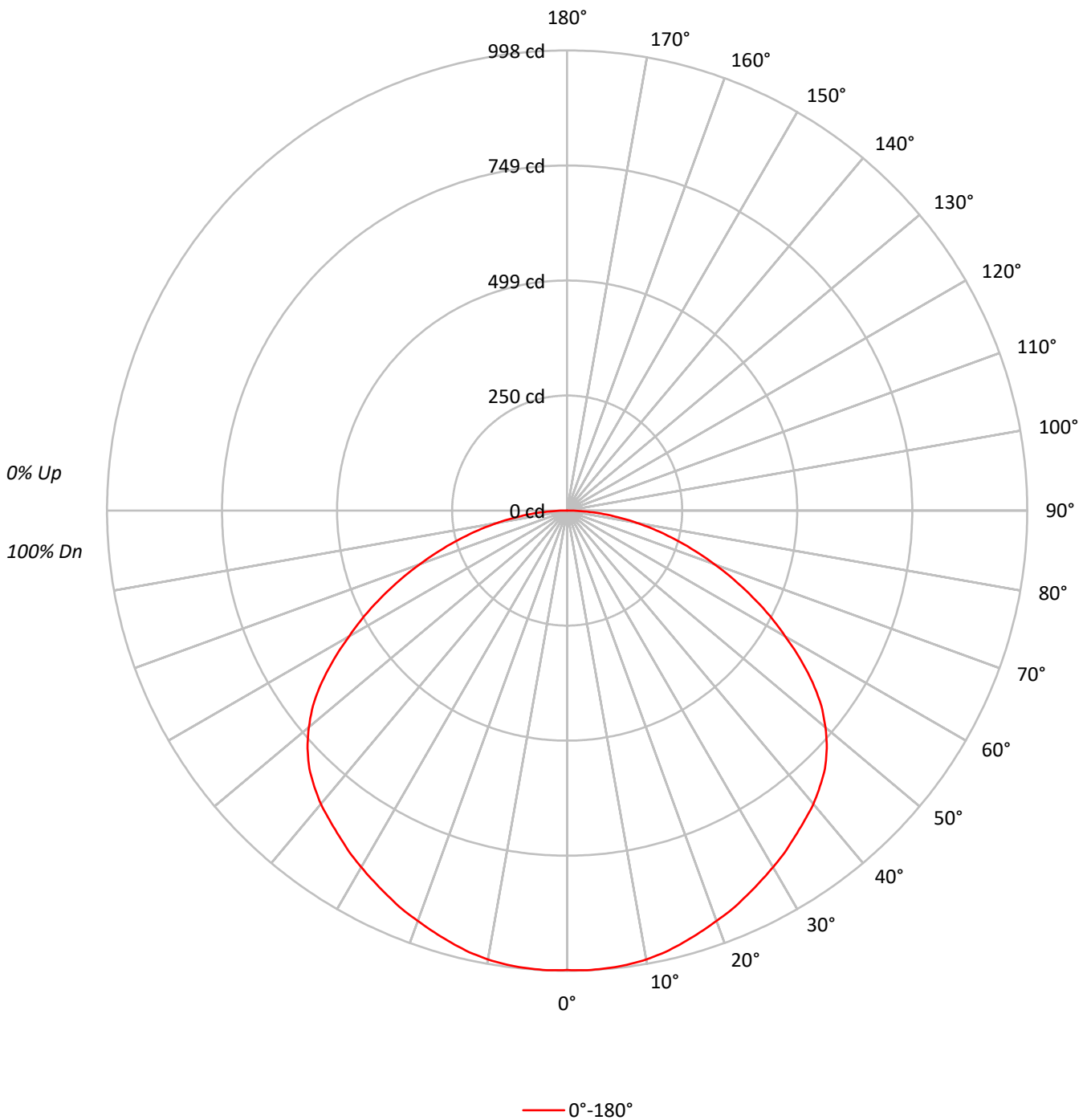
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3299.9 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	94	105	101	97	93	96	93	90		93	90	87		89	87	85	82
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	64	60		68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		54	48	43	41
6	68	55	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	35	30		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	7927
5°	7957
10°	7987
15°	7994
20°	8020
25°	8089
30°	8204
35°	8372
40°	8630
45°	8900
50°	9054
55°	9017
60°	8699
65°	8345
70°	7906
75°	7470
80°	7046
85°	6609

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 9087 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.9	2.9
10°-20°	274.2	8.3
20°-30°	425.6	12.9
30°-40°	540.9	16.4
40°-50°	608.4	18.4
50°-60°	578.0	17.5
60°-70°	439.0	13.3
70°-80°	258.0	7.8
80°-90°	80.7	2.4
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°	794.8	24.1
0°-40°	1335.7	40.5
0°-60°	2522.1	76.4
0°-90°	3299.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3299.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	996	
5°	996	95
15°	971	274
25°	922	426
35°	862	541
45°	791	608
55°	650	578
65°	443	439
75°	243	258
85°	72	81
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	996.4
2.5°	997.7
5°	996.4
7.5°	993.9
10°	988.7
12.5°	980.9
15°	970.6
17.5°	959.0
20°	947.3
22.5°	935.7
25°	921.5
27.5°	907.3
30°	893.1
32.5°	878.8
35°	862.0
37.5°	846.5
40°	831.0
42.5°	811.6
45°	791.0
47.5°	763.8
50°	731.5
52.5°	695.3
55°	650.1
57.5°	599.7
60°	546.7
62.5°	496.3
65°	443.3
67.5°	391.6
70°	339.9
72.5°	290.8
75°	243.0
77.5°	197.7
80°	153.8
82.5°	111.1
85°	72.4
87.5°	36.2
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	20.01	21.71	20.38	22.02	22.34	20.01	21.71	20.38	22.02	22.34
	3H	21.81	23.35	22.19	23.67	24.03	21.81	23.35	22.19	23.67	24.03
	4H	22.50	23.96	22.90	24.30	24.68	22.50	23.96	22.90	24.30	24.68
	6H	23.05	24.40	23.46	24.76	25.15	23.05	24.40	23.46	24.76	25.15
	8H	23.24	24.53	23.67	24.92	25.32	23.24	24.53	23.67	24.92	25.32
	12H	23.39	24.63	23.82	25.01	25.43	23.39	24.63	23.82	25.01	25.43
4H	2H	20.65	22.10	21.05	22.45	22.82	20.65	22.10	21.05	22.45	22.82
	3H	22.67	23.90	23.08	24.29	24.69	22.67	23.90	23.08	24.29	24.69
	4H	23.50	24.61	23.93	25.02	25.46	23.50	24.61	23.93	25.02	25.46
	6H	24.19	25.16	24.64	25.60	26.06	24.19	25.16	24.64	25.60	26.06
	8H	24.44	25.35	24.90	25.79	26.26	24.44	25.35	24.90	25.79	26.26
	12H	24.64	25.46	25.12	25.93	26.40	24.64	25.46	25.12	25.93	26.40
8H	4H	23.84	24.75	24.30	25.19	25.66	23.84	24.75	24.30	25.19	25.66
	6H	24.67	25.43	25.16	25.91	26.39	24.67	25.43	25.16	25.91	26.39
	8H	25.00	25.68	25.50	26.19	26.67	25.00	25.68	25.50	26.19	26.67
	12H	25.29	25.89	25.79	26.38	26.94	25.29	25.89	25.79	26.38	26.94
12H	4H	23.89	24.71	24.37	25.18	25.65	23.89	24.71	24.37	25.18	25.65
	6H	24.74	25.42	25.24	25.93	26.41	24.74	25.42	25.24	25.93	26.41
	8H	25.14	25.74	25.64	26.23	26.79	25.14	25.74	25.64	26.23	26.79