

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: P867420

Luminaire Tested: PRLX-2004-L-940-83L-L-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

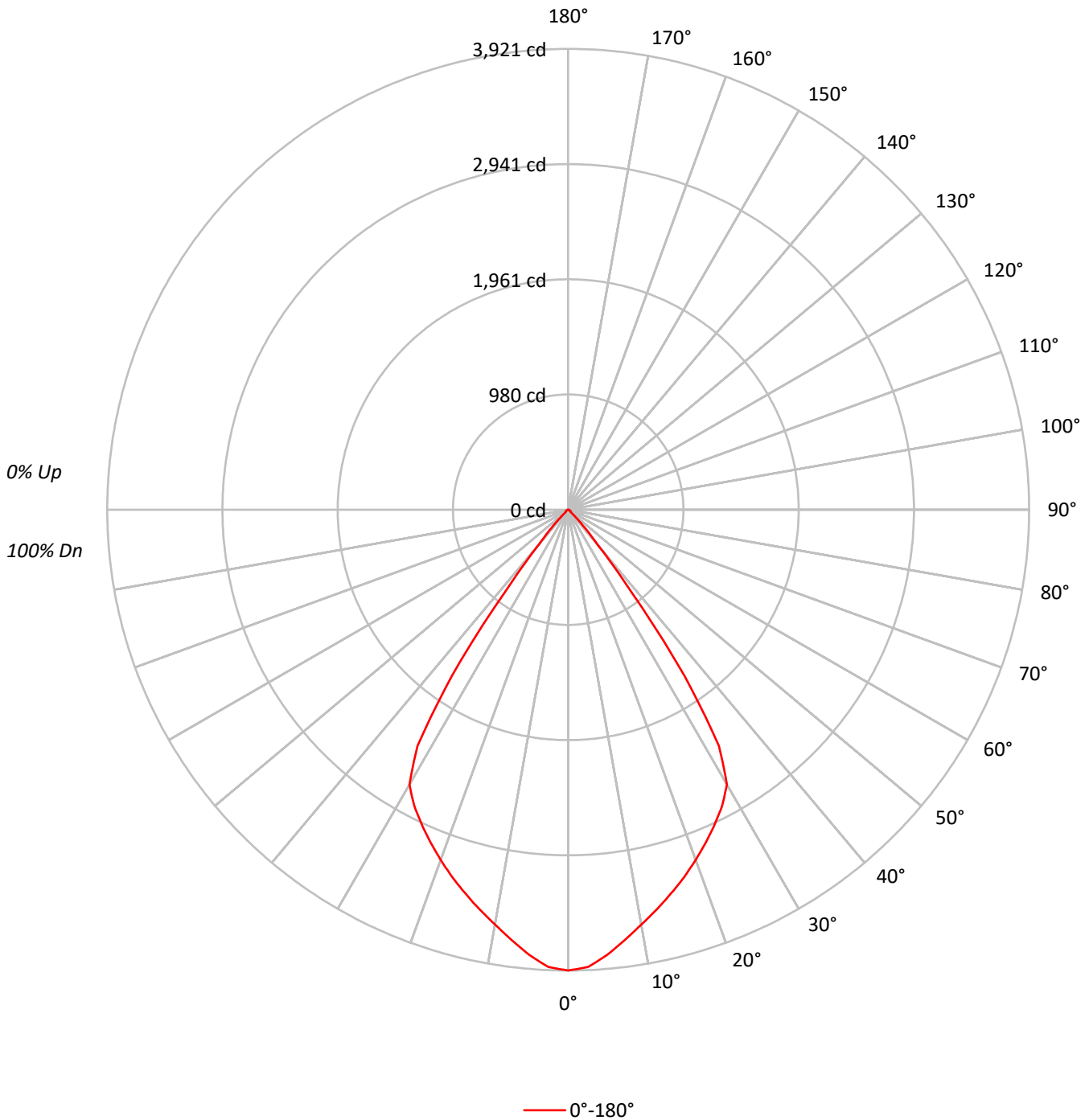
Test Method: LM-79-2019  
Report Number: P867420  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-87)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-L-940-83L-L-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,  
BELL WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3808.5 lumens  
Efficiency: N/A  
Efficacy: 59.0 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.05 / 0.98  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
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	113	111	108	106	111	108	106	104	104	103	101		101	99	98		97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87	84	82	81
4	97	89	84	80	95	88	83	79	86	82	78		84	80	77		82	79	76	75
5	92	84	78	73	90	83	77	73	81	76	72		79	75	72		78	74	71	70
6	87	78	72	68	86	78	72	68	76	71	67		75	70	67		73	69	66	65
7	83	74	68	63	82	73	67	63	72	66	63		70	66	62		69	65	62	61
8	79	69	63	59	78	69	63	59	68	62	59		66	62	58		65	61	58	57
9	75	65	59	55	74	65	59	55	64	59	55		63	58	55		62	58	54	53
10	71	61	56	52	70	61	55	52	60	55	51		59	55	51		59	54	51	50

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

	0°
0°	19345
5°	18831
10°	17956
15°	17267
20°	16652
25°	16069
30°	15380
35°	10375
40°	2503
45°	641
50°	225
55°	212
60°	197
65°	180
70°	167
75°	162
80°	153
85°	130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 641 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.9	9.3
10°-20°	952.1	25.0
20°-30°	1357.5	35.6
30°-40°	993.3	26.1
40°-50°	100.6	2.6
50°-60°	22.1	0.6
60°-70°	15.3	0.4
70°-80°	8.9	0.2
80°-90°	2.8	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°	2665.4	70.0
0°-40°	3658.8	96.1
0°-60°	3781.4	99.3
0°-90°	3808.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3808.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3921	
5°	3802	356
15°	3380	952
25°	2952	1357
35°	1723	993
45°	92	101
55°	25	22
65°	15	15
75°	8	9
85°	2	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3921.0
2.5°	3894.0
5°	3802.2
7.5°	3691.2
10°	3584.0
12.5°	3482.2
15°	3380.4
17.5°	3277.9
20°	3171.5
22.5°	3061.2
25°	2951.7
27.5°	2836.8
30°	2699.6
32.5°	2384.2
35°	1722.6
37.5°	876.0
40°	388.6
42.5°	205.9
45°	91.8
47.5°	32.4
50°	29.3
52.5°	27.0
55°	24.7
57.5°	22.4
60°	20.0
62.5°	17.7
65°	15.4
67.5°	13.1
70°	11.6
72.5°	10.0
75°	8.5
77.5°	6.9
80°	5.4
82.5°	3.9
85°	2.3
87.5°	1.5
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09
	12H	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.16
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20
	6H	0.00	0.00	0.00	0.31	0.78	0.00	0.00	0.00	0.31	0.78
	8H	0.00	0.03	0.07	0.48	0.95	0.00	0.03	0.07	0.48	0.95
	12H	0.00	0.09	0.21	0.58	1.06	0.00	0.09	0.21	0.58	1.06
8H	4H	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.36
	6H	0.00	0.09	0.26	0.59	1.08	0.00	0.09	0.26	0.59	1.08
	8H	0.04	0.34	0.57	0.87	1.36	0.04	0.34	0.57	0.87	1.36
	12H	0.25	0.51	0.78	1.01	1.60	0.25	0.51	0.78	1.01	1.60
12H	4H	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.33
	6H	0.00	0.09	0.32	0.61	1.11	0.00	0.09	0.32	0.61	1.11
	8H	0.13	0.39	0.66	0.89	1.48	0.13	0.39	0.66	0.89	1.48